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ERASMUS UNIVERITY ROTTERDAM
Erasmus School of Economics
Bachelor thesis Marketing

The Proliferation of Generic Medicines into a Post-patent Market: Dutch Pharmacists' Perspectives on their Ability to Deliver Value to their Patients.

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Date final version: August ~~7~~21, 2023

Acknowledgments

I would like to express my gratitude to my mentor and supervisor, Dr. Doron Zilbershtein, for guiding me through the thesis process and allowing me to pace myself to time for application to the Master's program. Furthermore, this allowed me to interview high-quality who know a lot about the pharmacies' operations. Furthermore, I am grateful to my parents for helping me with the research by providing participants. Moreover, I am grateful to my father, an expert in the field of pharmacists and the operation of pharmacies, for providing knowledge and reviewing my work. Additionally, I am thankful to my two translators, my father and my good friend A.J.C.M. van der Donk. Lastly, I am thankful for all the participants in the research. They took time out of their very busy schedule and allowed me to hear about their experiences.

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Abstract

This paper researches the perspectives of pharmacists towards changes and value creation of generic drug companies in the post-patent market in the Netherlands. Generics medicine proliferate the market after a patent on a medicine expires and gain market share by offering lower prices. However, certain externalities occur after this event and perspectives of stakeholders on this phenomenon are underrepresented. Value creation can differ market to market and stakeholders' perspectives have an important role in value creation.

By conducting interviews, coding and analyzing the data this qualitative multi-case study finds out what the pharmacists' perspectives are. The analysis is split into economic factors, operational factors, and patient quality factors. Pharmacists perceive Generics drug companies to create value by creating more accessibility for patients. However, they also perceive Generics drug companies to have caused problems for patient care, even bigger problems for operationality, and little to no profit for pharmacies. With the data from this paper Generic drug companies can better understand the value they create for pharmacies and improve the value delivered. This further contributes to the social change of patients due to them receiving better patient care.

Glossary

Branded medicine	Pharmaceutical product with a brand name provided and exclusively used by the manufacturer (World Health Organization, 2008);
Generic drugs	A medicine that is identical to an off-patent branded medicine in terms of the active substance(s), strength, and dosage form, but that may differ in inactive ingredients, name, appearance, and/or packaging (European Medicines Agency, 2022);
Patented medicine	Medicines with a title granted by public authorities, these vary in every country, that confers temporary protection from competitors for the exploitation of an invention upon the person who reveals it, furnishes a sufficiently clear and full description of it and claims this monopoly (World Health Organization, 2008). When the patent expires, only the protection on the sole use of the substance is lost. The name of the medicine remains the property of the innovator;
Preference Policy	Policy of the government allows insurance companies to declare one -usually the cheapest- generic from a cluster of generic medicines preferent, meaning that only that generic will be reimbursed and therefore ought to be dispensed by pharmacists (Zorginstituut Nederland, 2022). It is commonly known as preferentiebeleid.

INTRODUCTION

Since the enactment of the preference policy, the percentage of Generic medicines of all medicines sold in pharmacies has risen from 57.4% in 2008 to 80% in 2022 (SFK, 2009; SFK, 2023; GaBi, 2010; Grupstra, 2022; van de Water, 2019). Furthermore, because of major pharmaceutical companies' key patents on major drugs expiring this percentage will probably rise even more (Higgings-Dunn, 2021). When a patent on a medicine expires, Generic drug companies, GDPE, create a certain value to acquire the market share from the innovators of the medicine (Kamat, 2022). In the Netherlands, this acquisition requires because of the preference policy that a contract is made with the insurance companies (Ministerie van Volksgezondheid, Welzijn en Sport, 2022). Therefore, GDPE focus on creating value for the insurance companies rather than the pharmacists (Kamat, 2022). Because if they don't secure the contract with the insurance company they cannot acquire the market share required to create value. Still, GDPE do perceive that they create value for pharmacists. This value consists mostly of monetary advantages for example rebates, but also non-monetary advantages like timely supply and key alliances with competitors. However, with this change of supplier, the pharmacies have been experiencing some negative externalities like increased medicine shortages (Grupstra, 2022).

Value-creation is a co-creation process in which two parties voluntarily exchange goods and increase net benefits (Windsor, 2017). If one party would experience a decrease in their net benefits, the exchange would not happen. Otherwise, the exchange would not be voluntary. The perspectives of the GDPE in the post-patent market on their value creation have been researched. However, value creation is a two-way process between stakeholders and the value-creator. Therefore, this study seeks to explore and understand how pharmacists perceive the changes and value creation arising from the overtake of the market share of GDPE in the post-patent market.

Background

Pharmaceutical Patent

Patents are granted to innovators who have founded a novel solution or process. With the patent, the owner can exclude its competitors from using his invention and deriving any commercial benefits (Walker, z.d.) Patents typically last 20 years from the date of patent

application filling. But because the research and development period is included in this timeframe the patents can be extended. It depends on the various length of drug discovery, validation, and marketing. Based on the amount of time invested in developing the drug the patent could be extended more than ten years. Because of their market exclusivity, the innovators after the development period of ten to twelve years are able to ask for very high prices for their products (Burger et al., 2017). This could last eight to ten years until the patent expiration date or even longer if the innovators get a patent extension. The commercial benefits from being able to secure a patent and being able to extend it stimulate the R&D investments from pharmaceutical companies. Profit from a patent is on average $18.6 billion and this is ten times more than the average $1.8 billion cost of new drug development (AHIP, 2021).

However, when a certain medicine is granted a patent it isn't the only one which can be prescribed for its targeted illness (Aronson, 2020). There exists certain drugs which are called me-too drugs. These are structurally related to the first-in-class compound, belong to the same therapeutic class as the original, and are used for the same therapeutic purposes. However, they could differ in the specificity of pharmacological action, adverse reaction profile, or drug-drug interactions. The presence of these me-too drugs helps with drug shortages and with providing competition to otherwise monopolist innovators.

Post-patent Dutch Pharmaceutical Market

When a patent expires, the competitive advantage is lost by the innovators and competition begins in the market (Kamat, 2022). GDPE don't need to spend a lot of resources developing as the innovators and can thus offer their products for a lower price than the innovators. The only developing costs for GDPE are in showing that their drug is bioequivalent to the reference medicine (College ter Beoordeling van Geneesmiddelen, 2019). However, because there exist many GDPE and all of these want to acquire a large market share. GDPE have multiple strategies to tackle the post-patent market (Kamat, 2022). Next to offering substantial price reductions, they also employ differentiation and promotion strategies (Raasch, 2009).

Market access to the Dutch pharmaceutical market happens mostly through insurance companies (Grupstra, 2022). Ever since the enactment of the preference policy Insurance companies can select a preferent from multiple drugs with the same substance (van de Water, 2019). Not all medicine is part of the preference policy, but this percentage is as mentioned before a small number. Insurance companies do look at other specifications, but they mostly look at the low price of the drug (Kamat, 2022). The specification of branding is not effective in the Dutch market. When medicine is prescribed no brand is written down on the recipe (*Online zelfstudie wet en regelgeving - Voorschrijftoets*, 2020). Only when a patient has a medical necessity for a drug then the brand is written down (Veldkamp et al., 2022). However, the amount of recipes with medical necessity is less than 3% meaning that the brand only matters for less than 3% of drugs delivered.

Stakeholder Perspective on Value Creation

By using the strategies mentioned in Kamat (2022) GDPE can identify or develop competitive advantages by effectively employing their resources to provide value better than their competitors (Drucker, 1994; Johnson et al., 2020). However, this statement does not imply that the value or strategy has to be focused on stakeholders. Companies could also just focus on their direct customers or shareholders. Stakeholder theory has ever since it was introduced by Freeman (1984) gained a lot of ground in the literature that focuses on value-based selling. This theory advocates to include all relevant stakeholders when it decides its strategy. Therefore, the perspectives of all stakeholders on their value creation are important to businesses. “Involving customers is not enough. For a network to be productive, all stakeholders need to feel they get value in exchange” (Gummesson et al., 2014). As mentioned before, value creation is a two-way process in which both parties generate value (Windsor, 2017). For example, when managers are evaluating an offer from a company they don’t just have one formula for price and value (Anderson, 2000). To make a decision managers look at multiple value drivers and not only price (Ulaga, 2003).

Relevance and Significance of the Study

Scientific Relevance

The academic relevance of this study can be explained as follows:

This study wants to analyze the perspectives of pharmacists on changes and value creation in the post-patent market in the Netherlands. This contributes to the theory of stakeholder value creation. Given that value creation is a two-way process it is important to also view the perspectives of stakeholders. Research on value-based selling has already made great strides and there is also research on the theory behind customer perspectives on value-based selling (Keränen, 2023). However, in the Dutch post-patent market pharmacists don't make contracts with the GDPE, but the insurance companies make these contracts and act as a sort of middleman. This extra layer between the GDPE and pharmacists could influence value creation. Finally, by understanding the pharmacists' perceptions of value creation theory development related to post-patent strategies aimed at value creation for stakeholders can improve. This development might eventually help improve scientific drug development processes (Schuhmacher et al., 2016).

Managerial Relevance

Value creation is as mentioned before a co-creation process in which both the stakeholder and creator add value. This study is managerial relevant because it studies the perspectives on value creation and this can improve understanding of which strategies to use. Strategies are in turn a tool to create competitive advantages (Johnson et al., 2017). The following two points explain the managerial relevance of this study:

This study provides insights into value creation for pharmacies in the post-patent market. This improves understanding of strategies used by pharmaceutical companies which helps provide greater value for pharmacists, insurance companies, and pharmaceutical companies. Specifically focusing on the Netherlands helps better target this market and help pharmaceutical companies choose efficient strategies for this market. In turn, this also helps insurance companies, patients, pharmacists, and the overall the Netherlands in general by getting better-targeted value from the pharmaceutical companies.

Problem Statement

Pharmacies rather than benefiting from the overtake of production by generic pharmaceutical companies in the Dutch market seem to have been negatively impacted by increased medicine shortages and increased medicine switching (Grupstra, 2022). Shortages of medicines have risen ever since the enactment of the preference policy in 2008 and these shortages occur more commonly with the preferred drugs than with other drugs (Berenschot, 2018). The percentage of drugs which are made preferent has risen to 89% percent in 2020 (SFK, 2021). This rise in preferred products has meant that pharmacies are experiencing fewer profits and discounts (Grupstra, 2022). The identified gap in the literature is the perspective of Dutch pharmacists on changes and value creation of GDPE in the post-patent market, specifically the Dutch market (Kamat, 2022). The pharmacists' perspective would help suppliers understand their created value (Ulaega, 2003). The problem to be studied is Dutch pharmacists' perspectives on changes and value creation in the post-patent market of Generic drug companies.

Purpose Statement

The purpose of this qualitative method exploratory multi-case study with semi-structured interviews with Dutch pharmacists is to explore the perspective of Dutch pharmacists on changes and value creation due to generic medicine proliferation in the post-patent market. Because there exists a lack of knowledge on this topic exploratory research is justified (Swedberg, 2020). Qualitative research helps with developing an understanding of the experiences of pharmacists (Fossey, 2002). The preferred research design is a multi-case study with semi-structured interviews. These gives a bit more robustness than a single-case study, a stable foundation, and still have space for some spontaneity (Wethington & McDarby, 2015; Hunziker, 2021). This spontaneity exists in being able to ask questions such as 'why' and 'how' to clarify certain perceptions and expressions. Pharmacists who have worked in the pharmacy for ten years are preferable as the targeted interview group (Schmidt, 1986). Snowball sampling are used to gather participants. This helps me gather participants easily and more likely lead to participants with the same level of knowledge (Parker, 2019). Ten is an adequate sample size. This avoids a too large sample size but still allows it to reach saturation(Boddy 2016;

Sandelowski, 1995). Pharmacies in the Netherlands differ in their procedures and thus it would be logical that different regions be represented in the sample (Storimans et al., 2006). Ultimately, the purpose of this qualitative research is to improve patient care.

Research Question

This study aims to answer the following research question: How do Dutch pharmacists perceive changes and value creation due to generic medicine proliferation in the post-patent market? The study is structured according to the three sub-questions:

Sub-question 1

How do pharmacists perceive economic changes in the Dutch post-patent market?

This sub-research question aims to understand what economic changes happen for a pharmacy when generic medicine proliferate the market. It tries to discover how the margins are affected.

Sub-question 2

How do pharmacists perceive changes in the quality of patient care in the Dutch post-patent market?

This sub-research question tries to understand what effects generic medicine proliferation has on the quality of patient care. The quality of patient care consists of three dimensions (Halsall et al., 2012). Firstly, accessibility is the patients' access to available services, medicines, and healthcare advice. The second dimension is effectiveness and it consists of getting medicines to provide their desired effect. Lastly, the perception of the experience is the last dimension.

Sub-question 3

How do pharmacists perceive changes in the functioning of the pharmacy in the Dutch post-patent market?

This sub-research question is designed to understand the perspectives of pharmacists on factors influencing operational factors due to the proliferation of generic medicine. The question is open to exploring whether logistics are positively influenced.

Overview of the Thesis Manuscript

Following the introduction this thesis goes into literature that discusses the post-patent market. In the review, key themes are identified and the gap in the literature is shown. To provide a structure for supporting the theory of the research study a theoretical framework is

developed. The Methodology section then explains the process of this research and research design. Next up the results are reported and the findings of the interviews are discussed. Finally, a conclusion of the study are given by answering the research question and the implications and recommendations are discussed.

THE LITERATURE LANDSCAPE

Literature Research Strategy

To find relevant literature about value creation in the post-patent pharmaceutical market various keywords were used in the following search engines: Google Scholar Google, J-Stor, and Research Gate. Examples of the keywords or phrases used are the following: 'value drivers pharmacy', 'value of clinical pharmacy services', 'value creation pharmaceutical sector', 'pharmaceutical post patent market', 'pharmacy perspective value', 'pharmaceutical patents', 'pharmaceutical patent', 'pharmacy profitability netherlands' and 'generic medicine netherlands'. Furthermore, articles were discovered by looking at articles that cited relevant articles, by using the related articles function of Google Scholar, and by looking at articles cited by relevant articles. Additionally, the Dutch site SFK.nl was used for articles that are published in the pharmaceutisch weekblad, a Dutch specialist magazine for pharmacists.

Links to relevant literature were kept on a list-making site for organizational purposes. Firstly, summaries of the relevant literature were made and then a literature gap analysis was made. The purpose of this literature gap analysis was to deliver a meticulous summary of all the primary research in response to the research question (Clarke, 2011). This methodology is explicit and precise and aims to minimize bias, thus enhancing the reliability of the conclusions drawn. In this gap analysis, the researcher established the gaps in the relevant literature such as limited scopes or neglected perspectives. Research opportunities in the literature were also established. The gap analysis is available in Appendix B.

Literature Review Process

This research discussed the characteristics affecting value creation in the Dutch post-patent market. For the benefit of elucidating the key terms of this study, the literature review followed a specific roadmap. In Appendix A a map of the literature review process is given. The research topic was divided into five sections: 1) economic factors 2) quality of patient care 3) operational factors 4) presentation of the gap in the literature 5) the theoretical framework for customers' perspective on value creation.

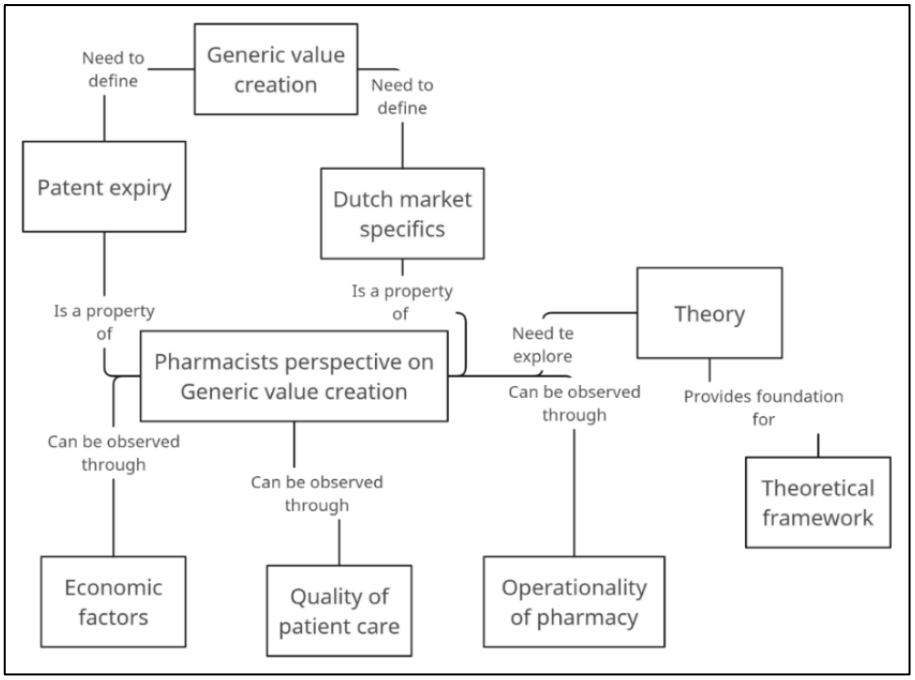

Figure 1 Core Elements of Literature Review

Key Themes in the Literature Landscape

Economic value

GDPE create monetary value such as rebates for distributors (Kamat, 2022). There are two ways this value is created: one way Is through offering the products at a lower price than the innovators and the second is that they offer the distributors heavy rebates and discounts. The GDPE can offer these discounts because they use economies of scale and have established

their factories in cost-benefitting countries like India. Furthermore, GDPE have much lower research and development costs than innovators. Generic medicine generally tends to have 20-80% lower prices than their originators' counterparts depending on the medicines sales, for example products with a lower turnover receive a smaller price reduction percentage(Dylst, 2013; Grupstra, 2022). Generic medicine pricing is even lower when a country introduces a tendering-like policy (Grupstra, 2022). In the Netherlands, a preference policy was introduced in 2006 and this meant that the insurance companies could assign which medicine would be reimbursed. In 2008 the insurance companies started making their own individual preference policy. For example, this policy reduced the health expenditure in the Netherlands by €0.8 billion in the period 2010-2015 (Pharmaceutisch Weekblad, 2015).

However, the implementation of the preference policy meant that pharmacists are required to provide preferent generics medicine to patients (Grupstra, 2022). They no longer had the freedom to choose which generic medicine they provided and thus they no longer could profit from the discounts that the GDPE offered to them. Moreover, another negative effect has come with the preference policy: increased medicine shortages (KNMP, 2020). When such a shortage occurs, commonly, a pharmacist tries to find alternative medicines, often abroad (Grupstra, 2022). However, these alternative medicines are not reimbursed by definition (van de Water, 2019). In most cases, the insurance companies do reimburse them, but sometimes the pharmacist or patients have to pay the costs.

Literature on generic medicine proliferation has mostly attributed their main value creation to be economic value (Dylst, 2013). Kamat (2022) has shown that the strategies of the GDPE have been to focus on these price and discounts strategies. The proliferation is further emphasized by Kourkouta (2020) in his review of generic drugs. His research seemed to confirm that the reduced price of generic medicine compared to branded medicine significantly reduced pharmaceutical costs. Research more specific to the Dutch market seemed to paint a different picture. Grupstra (2022) and van de Water (2019) both mentioned the consequences of the preference policy which affect the profitability of the pharmacy. Their research implied that the pharmacies are not being affected economically by the generic medicine proliferation. Further

research needs to be carried out to determine whether pharmacies are influenced economically by the generic medicine proliferation.

Quality of Patient Care

The next element that is discussed in research to differ between GDPE and branded medicine is the quality of patient care. The strategy of GDPE is not to improve this aspect of the product but to stay equal to the branded medicine (Kamat, 2022). When it wants to enter the market it must show that is bioequivalent to the innovators' product (Tuleu, 2021).To be bioequivalent, a pharmacokinetic study with healthy volunteers needs to show that the 90% confidence interval of the ratios lies between 0.8 and 1.25. In medicine with a low therapeutic index, the requirements are 0.9 and 1.1. Still, one advantage of generic medicine in this aspect is that the accessibility to medicine is higher (Kamat, 2022). In the Dutch market, this is only an advantage for those who have to pay for their own medicine (van de Water, 2019). However, the range of 0.8 and 1.25 causes generic medicine to not be bioequivalent to each other (Tuleu, 2021). When a generic medicine is 0.8 equivalent to the originator and another generic medicine is 1.25 then those generic medicine are not bioequivalent to each other. Switching between these generic medicine can have implications on patient care. These implications can be very severe but depend on the type of medication (Gozzo et al., 2022). Switching is caused by multiple factors, most importantly the doctors and insurance companies, where factors such as quality and reimbursement are the criteria for when to switch (Gupta, 2020). This research has however a limited scope and only researches the incentives for switching and not what the consequences are. Further research needs to be carried out to determine what the consequences of switching medicines for pharmacies are.

GDPE also do not focus on the side effects and new indications of the drugs (Kamat, 2022). These two elements are part of innovative strategies and are mostly employed by innovator companies. The innovative strategy also tries to improve access and convenience of using a drug. As mentioned above, acceptability of drugs is also an important element of patient care. However, in the paper of Kamat (2022), it is also mentioned that innovator and GDPE can have strategic alliances. This means that an innovator after the patent expires helps a

GDPE or has a generic sister company produce the drug. With this adaptive strategy, the drug is also made available to price-sensitive customers.

Clinical effectiveness seems to have been negatively impacted by the GDPE. Firstly, the acceptability of generic medicine is lower than branded medicine (Tuleu, 2021). For example, factors in this acceptability would be palatability, appearance, and required dose. The acceptability could undermine treatment efficacy and safety in certain populations. Therefore, it would increase the chance of treatment failure and produce patient unhappiness. Furthermore, there is an increase in psychological factors when generic medicine proliferate the market and this has two factors (Dunne, 2015). The first factor is medicine switching and this increases confusion because of the patients not understanding why their medicine has suddenly switched (Grupstra, 2022). Switches are mostly caused because of the preference policy but also by shortages. Shortages also cause extra confusion because when a medicine is no longer available the pharmacist has to import the medicine from abroad (van de Water, 2019). As long as the insurance company reimburses the medicine there is no problem, but because it is unclear who is responsible for reimbursement this creates extra confusion. Secondly, patients have negative connotations of generic medicine (Dunne, 2015). When a patient does not trust the generic medicine it causes them to be less adherent (Tuleu, 2021). Consequently, this impacts the clinical effectiveness of a medicine.

Research on the quality of patient care has been mostly focused on primary effects that would decrease overall care. Tulue (2021) mentioned that the acceptability is lower for generic medicine and Dunne (2015) mentioned that patients are affected by psychological factors decreasing the treatment effectiveness. Furthermore, Kamat (2022) mentioned that GDPE don't focus on innovation. However, in his research he confirmed that GDPE have to do a bio-equivalence test to get market access. Tuleu also mentioned that the medicine has to be in a certain range to be bio-equivalent. Further research needs to be done to establish what effects generic medicine proliferation has on the quality of patient care.

Operational Factors

Lastly, changing to generic medicine influences the operationality of the pharmacy (Dunne, 2015). These mostly consist of effects affecting time and practical matters. When a product loses its patent multiple GDPE try to get the market share. Not only offering a good price is important but also timely supply (Kamat, 2022). For most reimbursement markets this is a very important factor when they decide which medicine is preferred. Moreover, the presence of multiple GDPE in the market could reduce the risk of shortages. When one of the GDPE or originator is not able to deliver then there is at least the presence of other companies able to cope with the shortages. Another aspect of the proliferation of generic medicine that improves the practical matters in a pharmacy is that there is less confusion for patients and personnel because of less confusion with medicine names (Aronson, 2004). Generic medicine starts with the name of the substance and then its brand, while Branded medicine usually has its own. This decreases the patient's confusion with drug switching and this decreases the amount of time needed for the pharmacist to explain the change (Merchant, 2020). Moreover, personnel of the pharmacy recognize the names of the substance faster and in turn improve the understanding of what they are dealing with.

However, the proliferation of generic medicine also seems to have some negative externalities on the Dutch market (Grupstra, 2022). For instance, the shortages of medicine have risen significantly since 2012 (Berenschot, 2018; KNMP, 2020). This has mostly been attributed to the preference policy, but to become preferent a medicine company has to offer the lowest price (Grupstra, 2022). GDPE focus on this strategy and are usually able to become the preferred medicine. This however puts pressure on the prices to become lower and lower and thus take away the financial incentives for manufacturers. This resulted in disruptions and shortages in the supply of medicine (Pharmaceutisch Weekblad, 2012). In the pharmacy this causes the pharmacist to spend extra time trying to solve the medicine shortages by trying to get the medicine abroad (Grupstra, 2022). 40.9% of all logistic medicine modifications in 2016 is caused by shortages (Loon van, 2020). Given the rise in the number of shortages, it would only be logical that this number has increased (Grupstra, 2022). Moreover, the increased switching that comes with the preference policy has caused it isn't efficient for pharmacies to have

excessive stock of medicines in their pharmacy. This would only increase spillage and thus pharmacies should try and limit the stock they have in the pharmacy. Paradoxically, this means that the preference policy increases the danger of a medicine shortage. It has to be noted that this policy is not the only cause of the medicine shortages (Weda et al., 2020). If there isn't a qualitative good resource available, natural disasters or stricter demands for the quality of the medicine. Secondly, the proliferation causes there to be competition in the market (Kamat, 2022).

Insurance companies because of the preference policy can switch between GDPE to improve the current contracts (Grupstra, 2022). Of course this is beneficial for the overall healthcare in the Netherlands, but it has some negative consequences for patients and pharmacists. Firstly it has some negative consequences on the stock of the pharmacy. Pharmacies are left after a switch with stock which they will not get reimbursed for. This leaves them with many different generic medicine in their stock and this increases spillage. Moreover, patients have to deal with switching between different medicine and this increases the overall medical care needed. Pharmacists and personnel of the pharmacy have to invest lots of time trying to explain why the medicine has switched and switching further also leads to added complex administration work. Not being able to fully explain why their medicine switched and having to deal with angry and frustrated patients leads to decreased job satisfaction for pharmacists.

Explanation to patients isn't only the cause of the switching, it also is affected by the negative connotation surrounding generic medicine (Dunne, 2015). Patients aren't fully educated and pharmacists indicate they have to provide extra education to them to improve their understanding of generic medicine.

Research on operational changes due to the generic medicine proliferation has been given from the perspectives of non-pharmacists. Recent research showed that there were many negative consequences of the proliferation. Grupstra (2022) mentioned that the shortages are associated with the preference policy and this policy only affects generic medicine. Furthermore, Dunne (2015) mentioned that there is increased explaining due to confusion and Grupstra (2022) also showed that explaining is caused by confusion. However, Merchant (2020)

mentioned that confusion should decrease due to the use of the substance names. Furthermore, Kamat (2022) mentioned that pharmaceutical companies try to have timely delivery. Further research needs to be done to determine the perspectives of pharmacists on the operational factors and how the proliferation of generic medicine causes these factors.

Gap in the Literature

The paper of Kamat (2022) discussed the value representatives of generic pharmaceutical companies say they have generated in the post-patent market. Kamat acknowledged that the perspectives of the different stakeholders, which in the Dutch market are insurance companies, pharmacists, and the government, are not represented on the subject of value creation of GDPE. Pharmacists have been experiencing some externalities, like medicine shortages and increased switching, cause of the preference policy (Grupstra, 2022). As mentioned before, medicine that becomes preferent are mostly generic medicine. These two different perspectives would indicate that generated value in the Dutch market is different than what was suggested in the paper of Kamat (2022). Therefore it isn't clear what Dutch pharmacists' perspectives are on changes and value creation of Generic drug companies in the post-patent market. The paper of Grupstra (2022) did give the perspective of a pharmacist on the influence of the preference policy, but this might not represent the full view of all pharmacists and only discussed the effect of this policy. Researching value creation from the stakeholders' perspective is important because stakeholders are both recipients and creators of value in joint value-creation processes (Freudenreich et al.,2020). A more clear overview of the research gap is given in Appendix B.

Theoretical Framework

The concept of value has been studied for a long time and can be defined in many different ways (Haksever et al., 2004). Value can, for instance, mean the value of things (Neap & Celik, 1999). However, in this research the concept of value is taken further than just the value of things and emphasize on the value derived from strategies of the pharmaceutical generic companies. Value in this definition can still range from price to more complex definitions (Haksever et al., 2004). For example, Porter (1985) defined value as "what buyers are willing to pay" and adds that when firms offer equal benefits for lower prices or provide unique benefits

that offset the higher prices they can achieve superior value. For this research, the definition of value used in Baier (1969) will be used. Baier explained value as the following: "Value is the capacity of a good, service, or activity to satisfy a need or provide a benefit to a person or legal entity." This definition does not only include market values but non-market values as well. For the value to exist, the value must of course be perceived as such by the recipient and in this research those recipients are the pharmacists (Haksever et al. 2004).

In the theory of Haksever, value depends on the stakeholder group. For this research the pharmacists are the stakeholder group and as they are customers of the pharmaceutical companies the framework for customers is the relevant framework. Due to the dual character of value creation, the process of value creation is split into value creation and value destruction. For the discussion of value creation or destruction, Haksever identified three dimensions: financial, nonfinancial, and time. Financial entails factors that have a short-term and long-term monetary impact on the stakeholders. Nonfinancial are the factors that do not create monetary value short-term even if they could provide monetary benefits in the future. Time is seen as the speed of access to the benefits, time savings provided and the extension of time horizon over which benefits continue.

For the customers, the financial benefits created are the superior quality products at competitive prices. Value can be destroyed in the financial dimension when customers have additional costs for the same quality of products or have additional costs such as extra maintenance or transportation costs. In the dimension of nonfinancial benefits, value can be created for customers through higher reputation of the products, easier to use products, or more information offerings about the product. Value can be destroyed in this dimension through failure or uncertainty about the products benefits, lack of full knowledge about the product, or other harmful effects such as health risks. Lastly, value can be created in the dimension time through time savings of the product, timely delivery, reliable products with short downtime, quick replacements of failed products. Value can be destroyed in this dimension through time spent learning the product or time spent resolving problems.

Stakeholder group	Value dimension	Value created (benefits/ rewards) and activities that create them	Value dimension	Value destroyed (costs/risks) and activities that lead to them
Customers	Financial:	Well designed superior quality products at competitive prices. Reliable, durable, and low maintenance products, with low operating costs. Price reductions resulting from gains in operational or supply chain efficiency.	Financial:	Price paid for the product, cost of returning a defective product, refusal of refund for an unsatisfactory product, high repair and maintenance costs. Poorly designed and produced product, poor service and warranty system and policies.
	Nonfinancial:	Product works as promised, easy to install and easy to use, customer support service that is competent, reliable, and courteous. Information about product use, safety, maintenance, and repair. Image and status gained from a prestigious product.	Nonfinancial:	Failure to deliver expected benefits, uncertainty about product benefits, lack of full knowledge about the product, its proper use, and its harmful effects, health risks.
	Time:	Time savings provided by the product, benefits that last a long time, products delivered at the promised time or at the time required by the customer. Products that are reliable with very short downtime, fast service response and repair for failed products. Quick replacement of failed parts.	Time:	Time spent learning to use the product, time spent trying to solve problems, repair, and maintenance, searching for repair service, or replacement for the failed product.

Table 1 Conceptual framework from A Model of Value Creation: Strategic View by Haksever et al., 2004, Journal of Business Ethics, 49, https://doi.org/10.1023/B:BUSI.0000017968.21563.05

The first proposition of this research is the following: Dutch pharmacists perceive the

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proliferation of generic medicine in the post-patent market in the financial dimension as a value creation. The second proposition is: Dutch pharmacists perceive the proliferation of generic medicine in the post-patent market in the nonfinancial dimension as a value creation. The third proposition is: Dutch pharmacists perceive the proliferation of generic medicine in the post-patent market in the time dimension as a value creation. ~~'Value chain' is a term coined by Porter (1985) to describe the full range of activities, which are required to bring a service or product from the beginning, different phases of production, distribution to customers, and final disposal after use. It is assumed that the product gains value when it moves from player to another player in the chain (Hellin & Meijer, 2006). Therefore, the value chain can be used as a tool to disaggregate a business into major activities, thereby the identification of competitive advantage sources is possible (Brown, 1997). For this study, this theory can be applied to the product GDPE deliver to the pharmacists. This product can be disaggregated into different sources of competitive advantages and from the literature three different values are identified when generic medicine proliferate the market: monetary, logistical an quality of product value. Value chain analysis helps focus on the dynamics of complex linkages within a network, wherein both value creation and value capture occur in a value system that includes suppliers and distributors (Zott et al., 2011). Furthermore, by segmenting the values, the perspectives of pharmacists can more easily be understood and analyzed. A conceptual framework is displayed in Figure 2 in Table and Figures. Further literature on the subject of perspectives of customers on value creation mentioned helps understand the perspectives of pharmacists in the post-patent market.~~

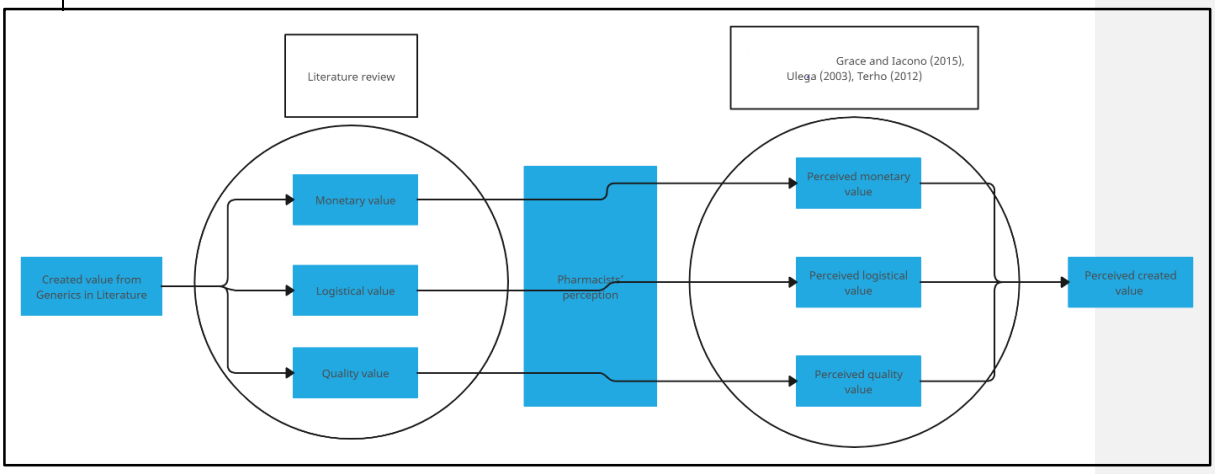

Figure 2 The Selfdeveloped Theory of Value Chains and Key Elements

RESEARCH METHODOLOGY

Research Method

The selected research method for this study is qualitative research. This kind of research aims to address questions concerned with developing an understanding of the meaning and experience dimensions of human' lives (Fossey, 2002). Furthermore, this type of research helps capture the spontaneity of responses, personal views, and unique ways of expressing one's opinions to gain an in-depth understanding of a specific group (Branthwaite & Patterson, 2011; Kornbluh, 2015). A method that would not be appropriate for the research question is the quantitative method. This method involves simply collection of data for the purpose of establishing relationships between and among variables (Williams, 2007). Another method that is also not appropriate for this research is the content analysis study. This method reviews forms of human communication to identify patterns, themes, or biases. Given that we want to find out the perspectives of pharmacists and the best way of understanding them is through primary research, this method also does not seem appropriate.

Research Design

To gain a holistic understanding of the case this research uses a multi-case research design (Hunziker, 2021). Through understanding the differences and similarities between the cases I am enabled to develop a theory about factors driving these differences and similarities. This case study then help to understand pharmacists' perception of GDPE' value creation, looking for elements that can contribute to explaining the case. Another research design is literature review design and this consolidates existing research and integrates the knowledge into refined theories (Hunziker, 2021). Because this research has no previous research on the subject this method does not seem appropriate. Longitudinal research design is interested in the change of types of elements, circumstances, and their relationships over time. Because we are researching the perspectives of pharmacists at this moment this method also does not seem appropriate. Design science research design is another research design and it tries to find or develop a suitable solution for a problem. This method does not seem appropriate due to we want to describe perspectives and not find a solution to them.

Semi-structured interviews are used to collect data for this research, “Semi-structured interviews are balanced between standardized questions with fixed response options and more open-ended interviewing technique.” (Wethington & McDarby, 2015). This research design enables firstly to have a stable foundation of research-based themes and core questions. Secondly, they encourage spontaneity and enable the researcher to ask follow-up questions like ‘why’ and ‘how’ to clarify certain perceptions and expressions. Moreover, the open nature of semi-structured interviews encourages depth and vitality and allows new concepts to emerge (Dearnley, 2005).

Pre-data Collection

Population

The population from which the sample comes is all the Dutch pharmacist in the Netherlands which is the group this research searches knowledge about (Allen, 2017). The group of potential respondents for the study is the sample (Saunders et al., 2009). The research population of this thesis includes pharmacists in the Netherlands who are working in a pharmacy. Pharmacists are selected as the research population because they have more responsibility for patient care and thus have the most knowledge of what changes for a pharmacy when a patent expires because they for example are responsible for supervising the medicine supply chain (GPhC, n.d.). The research population also includes pharmacists from hospitals, outpatient, and public pharmacies. Furthermore, to manage resources like time and money research sampling was used. Research sampling provided a relevant benefit because otherwise these resources would have been spent interviewing the entire population (Saunders et al, 2009). This was done by selecting a smaller group out of the research population, who then were interviewed to acquire data for the research.

Sampling Method

The sampling method used for this research is judgement sampling (Barratt & Shantikumar, 2009). This method lets the researcher specifically approach individuals with certain characteristics. The attributes such as regionality and experience were explained to two pharmacists close to the researcher who then offered a list of emails for pharmacists who fitted the characteristics. The first attribute that was selected was regionality. As mentioned before

pharmacies in the Netherlands differ in their procedures and thus different regions should be represented in the sample (Storimans et al., 2006). Secondly, greater work knowledge and skill are associated with work experience (Dolton et al., 2005; Telsuk & Jacobs, 1998; Tokunaga et al., 1996). Consequently, pharmacists were selected on at least ten years of experience in the pharmacy. Lastly, pharmacies in the Netherlands have different types of structures and this could affect their perception of GDPE' value creation. Therefore, pharmacists from different structures were considered for the selection of the sample.

Sample Characteristics

The sample size for this research depended on at which level data collection did not provide any further addition of new insights, themes, or concepts to augment the research (Bowen, 2008). There's however no research indicating how much data should be collected before saturation is reached. Bobby (2016) and Sandelowski (1995) recommended a sample size of ten for a homogenous sample in a qualitative study. This allowed reaching saturation while avoiding a too-large sample size. Considering the time constraint of this research and the time constraints of the pharmacists, a sample size of ten was used for this research.

The characteristics of the pharmacists are represented in Appendix G. For example, participant 5 works in the province of Noord-Brabant, works in an outpatient pharmacy, and has 35-40 years of experience. Not all regions of the Netherlands are represented in the sample. This is mostly because the two information providers originated from North Brabant and this region is also overrepresented in the sample. What was most important in heterogeneity in this attribute was the differences between the Randstad and the rest of the Netherlands and the sample does represent both. In the type of pharmacy, there is also an underrepresentation of public pharmacies. However, most pharmacists when asked about their experience said that they have worked in a public pharmacy before they joined an outpatient or hospital pharmacy.

Data Collection

The data used for this research existed from semi-structured interviews. The respondents can react freely to the open-ended questions and because they can choose to share their perspectives in a broad or in-depth fashion this results in rich data (Harvey & Long,

2001). An interview protocol was developed to conduct the interviews. This protocol, given in Appendix E, is a script for the interview which introduced the respondent to the questioner, the context of the interview, ethical and privacy considerations, and questions from the questioner (Jacob & Ferguson, 2015). Based on the literature review the questions in the protocol were developed. Furthermore, each question was established to discuss certain factors of the themes from the literature review. Since the semi-structured format offers flexibility in structure it is still possible to find new themes and concepts (Decarlo, 2018).

Out of the ten interviews, nine respondents were contacted through emails, available in Appendix C. Their contact information was acquired after explaining the attributes to two pharmacists, one of whom also was used as an expert on pharmacist' work. The last participant was due to time constraints from both sides obtained through personal contact. The last participant did not suffice to the experience attribute, but to reach the sample size and because of seeing the value of fresh insights this was forsaken. The messages sent to the two pharmacists and potential respondents are presented in Appendix C.

Before the interview, the questioner followed the interview protocol and also took the participant through the informed consent form, available in Appendix B. At the start of the interview, the respondents were first asked to introduce themselves and then asked the questions from the protocol. Sometimes when something felt like it was worth exploring questions like what, how, and why were asked. When an event or phenomenon was unclear to the questioner further explanation was requested. At the beginning of the interview, the respondents were asked to give the key elements that changed in the post-patent market for the pharmacy specifically. This provided an introduction to the subject and provided an overview of what pharmacists thought were the key changes. At the end of the interviews the question was asked if they had anything to add that wasn't discussed already. This provided the option for the pharmacists to elaborate on certain themes they felt were important or introduce new themes. The interviews were conducted in a private area or online via teams and lasted on average 20~~30~~ minutes. An overview of dates and time are available in Appendix F. Due to time shortage, interview 7 only took 14 minutes. During interview eight no new concepts or new themes were discovered. As mentioned before, when no new themes or

concepts are being discovered then saturation is being reached (Bowen, 2008). Due to no new themes or concepts being discovered, the duration of the interviews decreased. Still all questions from the protocol were asked and follow up questions were asked. However, fewer follow up questions were thought of in the interviews and less explanation was felt necessary due more expertise of the researcher in the subject.

Post-data Collection

Data Sorting and Organization

The transcripts were written by using the program Trint and after letting the AI do the first draft of transcripts I checked the transcripts for errors (McMullin, 2021). Compared to outsourcing the transcript work, letting the AI do the first transcripts and then reviewing them is cheaper and allowed the researcher to ensure the transcripts were correct and closeness to the data (Bokhove & Downey, 2018). The transcripts were assigned numbers based on the date and were then sorted in a folder. Afterward, they were exported to the coding program Atlas.ti 23 (*ATLAS.ti*, 2023). The transcripts consisted of a total of 101 pages with an average of 10.1 pages per interview. After finishing the transcript was sent to the participants for member checking (Lincoln & Guba, 1989). The mail is available in Appendix G. Because the interviews were conducted in Dutch, the transcripts first needed to be translated into English and then for credibility back into Dutch. The translations were done for credibility reasons by two different people than the researcher. An example of an English transcript is visible in Appendix F. When all data was collected an thank you note, available in Appendix I, to the participants was sent.

Type of Data Analysis

The type of data analysis is King's template analysis (King, 2012; King & Brooks, 2018). This type of analysis provides a relatively high level of structure for the process of analyzing textual data, while still having flexibility to adapt it to the needs of the study. Firstly, this technique allows for identifying codes in the data. This initial coding or "Open Coding" allowed the researcher comprehension of the research topic and data (Saldana, 2012). Secondly, the template analysis recommends clustering the codes into similar or related codes. Axial coding was the type of coding used for reassembling the data and it helped determine the most important codes and reorganize the data set. The codes which followed out of the second

round of coding is available in Appendix L. In this research, this next hierarchical level of codes is called subthemes. Finally, overarching themes were formed by clustering similar or related subthemes. When certain codes could not be grouped into subthemes the King's template analysis allowed for the flexibility to discard these irrelevant codes.

Data Analysis Process

Firstly, table 1 shows an initial template of codes that are clustered into subthemes which are further clustered into themes. For example, the theme of pharmacy operations is composed of two subthemes, logistics and service to patients. The subthemes of logistics are then compromised of shortages, administration work, timely supply, and pharmacy stocks. Furthermore, the articles from where the codes are from are represented in the fourth column.

After the translation process, the transcripts were put into Atlas.ti 23, which enables the researcher to code easier (*ATLAS.ti*, 2023). In this program, every line of the transcript was looked at and a code was applied to certain fragments of the text. The fragments differed in length of sentences and also served as quotes for the different codes. After analyzing the transcripts codes were combined if they shared similarities. After specifying the codes the codes were linked and the relationship between the different codes was analyzed. In appendix N some examples of this process are available. This resulted in a network, where the themes subthemes, and codes and the relationships between them are evident. Furthermore, the different codes all had networks of their own. In this network, the codes could be traced back to the respondent and it is perceptible which respondents talked about a certain code.

Literature	Code	Subtheme	Overarching Theme
Dylst (2013), Grupstra (2022), KNMP (2020), Kamat (2022), van de Water (2019)	Research and development	Lower prices	Economical value
	Prefentiebeleid		
	Demand for medicine		
	Production location		
	Preferentiebeleid	Reimbursement	
	Alternative medicine		
	Lower marginal costs Generics	Discounts	
	Freedom to choose		
Dunne (2015), Gozzo et al. (2022), Grupstra	acceptability	Clinical effectiveness	Quality of patient care
	Connotation		

(2022), Kamat (2022), Tuleu (2021), van de Water (2019)	Medicine switching		
	Bio-equivalence	Quality of substance	
	Side effects and new indications		
	Strategic alliances		
Aronson (2004), Dunne (2015), Grupstra (2022), Kamat (2022), Loon van (2020), SFK (2012), Weda et al. (2020)	Shortages	Logistics	Pharmacy operations
	Administration work		
	Timely supply		
	Pharmacy stocks		
	Explaining	Service to patients	
	Education		

Table 21 Inductive Table from Literature

Assumptions

The things this paper accepts as true or at least plausible by readers of this paper are the assumptions (PhdStudent, 2021). Participants of this study are expected to have told the truth. This assumption is made because of four reasons. The first is the participants were told that if they were uncomfortable they could stop the interview at any second. Secondly, participants were allowed to withdraw their consent or statements of the transcript. This allowed them to give answers freely without fear of future consequences. Thirdly, all names of the participants were anonymized and places and experiences were categorized. This allowed the participants further freedom to provide their honest opinion. As a fourth measure, participants were not asked about specifics, but they were encouraged to provide a general or rough overview of a concept. The consequence of this assumption on the outcome of the study is that the findings could be incorrect due to the participants not telling the truth.

Limitations

The limitations of the research are as in any research multiple. Limitations are the potential weaknesses of the study which are made due to multiple factors like research design or time constraints (PhdStudent, 2021). Firstly, the interview questions were grounded in literature but were not developed with the initial template. This could have influenced the outcome of the data. Secondly, the sample of participants might not be a true sample of pharmacists in the Netherlands. For example, the region North Brabant was overrepresented in the regions. The data was furthermore influenced by the period in which it was collected.

Further limitations exist in the biasedness of the researcher. When analyzing the data it could be that I understand something different then than the participant meant. To prevent these biases several measures have been taken, which are discussed in the researcher biases prevention chapter. The consequences of the limitations for the outcome of the study are that the findings might not represent the true perceptions of pharmacists on GDPE' value creation. Another limitation of this research is the limited scope of only addressing one of the stakeholders. Other stakeholder groups can have different perspectives on generic medicine proliferation. Moreover, the scope of this research is the Netherlands and pharmacists probably have very different perspectives. Therefore, the external validity of this research is only limited to Dutch pharmacists.

Delimitations

To prevent the goal of the study to become impossibly large a set of delimitations which are definitions the researcher sets as boundaries for the study (PhdStudent, 2021). This research could have also been done with a different stakeholder group in mind, but I chose pharmacists specifically. This was done on the grounds of my being born into a pharmacist family and having worked in a pharmacy. Both these aspects have sparked my interest in the business of pharmacies. Furthermore, the duality of pharmacists is a very interesting phenomenon to me (Van De Pol et al., 2019). On one side they want to provide the best care to their patient, but on the other hand, they want to have a successful business.

Furthermore, this research could have also been done in another country or on a more global scale, but I specifically choose the Netherlands. This was because I already had some experience with pharmacies in the Netherlands and because I could easier get the contact information of Dutch pharmacists. The delimitations made it possible for the researcher to find the answer to the research question due to the study not being too large to complete.

Researcher Biases Prevention

Researcher bias can exist in much of the research and actions should be taken to prevent it (Indeed Editorial Team, 2023). Firstly, researcher bias in the interview questions was prevented through contact with two pharmacists due to letting the pharmacist check the interview questions (Enago Acedemy, 2021). The feedback they provided helped prevent bias in

the interview questions. For example, when a question was leading or unclear the feedback helped resolve the leading questions bias (Indeed Editorial Team, 2023). Further feedback such as feedback on the questions and the interview climate was asked in the first two interviews from the participants, this further helped diminish the possible researcher's bias and to also check whether I created a good interview climate. The feedback requested also entailed if the questions were leading or could nudge participants towards a certain direction. After the data analysis, the insights were shared with an expert in the field of pharmacy. This further prevented researchers' bias and gave more insights into the analysis. The expert also provided documents and reports to further understand his point of view.

Ethical Considerations

Certain measures have been taken to prevent ethical issues. Before the interview, the essential informed consent form was explained to the participants, which is available in Appendix D (Connelly, 2014). Firstly, participants were free to opt out of the study at any point in time. Secondly, Participants knew the purpose, benefits, risks, and funding behind the study before they agree or decline to join. There were no real incentives given to the participants, it was completely voluntary but to join the participants had more benefits than the harmful effects of the risks (Behi & Nolan, 1995). Thirdly, The identity of the participants was anonymized and further information was categorized. This helped provide privacy to the participants (Greaney et al., 2012). Otherwise, the data the participants could harm their businesses and reputations. Fourth, participants were only known to me and that information was hidden from everyone else, except the supervisor. The data collected will be destroyed after the thesis process is finished. Lastly, this research is free of plagiarism or research misconduct and the results are represented accurately. In preparation for the data collection phase, the researcher completed the ethical questionnaire (Behavioral Economics Department, 2023) and verified that my research has no known ethical challenges.

Trustworthiness

Credibility

Credibility can be defined as whether the researcher represents the research findings as a credible, conceptual interpretation of the original data (Kyngäs et al., 2019). There can be no

validity without reliability (Lincoln & Guba, 1985). A demonstration of validity is sufficient to establish reliability. To establish credibility member checks were conducted (Lincoln & Guba, 1985; Goldblatt et al., 2011). This was done by sharing and discussing the analysis of the transcripts with an expert in the field of pharmacy. This expert then shared his opinion on the analysis presented. After finishing up the final template, the data, coding process, and results of the analysis with the final template were shared with the researcher's supervisor Dr. Doron Zilbershtein to obtain feedback. Additionally, after finishing the transcript participants were asked if anything was wrongfully put and were allowed to change the transcript.

Dependability

By maintaining consistency throughout the research process a researcher can establish the dependability of a thesis which is concerned with the stability of the data over time (Lincoln & Guba, 1989). The Kings' template analysis played an important role in maintaining the consistency of the thesis. Firstly, literature was explored to develop, introduce and explain the research questions, background and relevance. Secondly, the literature was reviewed and key concepts were identified for the research question. An initial template was developed based on the literature review, which formed the basis of the interview protocol. This template was updated based on the findings from the interviews. The findings were then discussed again with the literature. Ultimately, based on the final template the research questions were answered, and recommendations for future research were made.

Confirmability

Confirmability refers to whether study findings can be confirmed by other researchers and whether the conclusions are derived from the information in the case study (Gupta & Sumrin, 2021). To conduct neutral research limiting the biases of all parties involved is necessary (Lincoln & Guba, 1989). However, complete objectivity can seldom be achieved in qualitative studies. Bias can exist in both the researcher as well as the participant's bias. Researcher bias could occur when the questions formulated are leading or could nudge respondents towards a certain outcome (Saunders et al., 2009). To limit this bias, the interview questions were developed with assistance from one pharmacist and an expert. Furthermore, feedback was asked after the first two interviews to check whether there was any nudging or

influence by the interview questions. Pre-conceived notions and the need to protect their image are reasons why participants' bias emerges (Saunders et al., 2009). In section 3.5 reasons why participants can freely answer the questions are given.

Transferability

Transferability in research allows findings to be transferred to different contexts and is often referred to as the generalizability of the research(Lincoln & Guba, 1989; Gupta & Sumrin, 2021). By interviewing participants from different contexts, such as regions or types of pharmacy, transferability can be achieved. Additionally, the pharmacists interviewed also worked in different areas and different types of pharmacies over the course of their careers. The raw data will not be shared with other researchers to protect the participant's privacy.

Triangulation

For further validity of the study triangulation of data was used. This is a procedure where researchers search for convergence among different sources of information to form themes or categories in a study (Creswell & Miller, 2000). This research strategy helps enhance the validity and credibility of the findings and mitigate biases in the research. The data and the insights from the data were compared with the findings in the literature review. Moreover, after completing analyzing the transcripts the findings were shown to an expert. This expert is a manager of multiple pharmacies and was the 'Formule manager' at Kring-apotheek. This made sure that his expertise was to provide a more global overview of the working of a pharmacy.

Saturation

Saturation is reached when there is enough information for replication of the study when the ability for obtaining new information has been attained, and when no new codes can be discovered (Fusch & Ness, 2015). As mentioned before there isn't a number at which saturation is reached (Mwita, 2022). For this research a goal of ten participants was set, because this was suggested by Bobby (2016). The supervisor suggested that this might not be enough participants to reach saturation. Following this suggestion, ongoing sampling was used. Gentles, Charles, Ploeg, and McKibbon (2015) argue for this technique because it isn't possible to decide which sample size is sufficient. As it isn't possible to decide this beforehand the researcher keeps on increasing the sample size until no new themes and codes are discovered.

However, during interview eight it felt like no new codes and themes were being discovered. Consequently, the researcher decided to keep the original goal of ten because it felt like saturation was being reached.

Self-reflection on the Study

The researcher had some basic skills before starting this research, now they are above basic but only just above. Firstly, when dealing with the literature review I already had a structure that I wanted, and that helped greatly. I also had a site that helped with providing an overview of the thesis named Trello. However, papers were still all over the place and sometimes I got lost where something I read was exactly. Later in the study, I discovered that the coding app I was using also had a literature review function. Next time this function will hopefully be a big help in dealing with the many papers. Furthermore, I had no idea what some sections should contain when writing the paper. Now I am still skeptical of the contents of some sections but I learned a lot of what a research should contain. Coding was an interesting progress. I have never done qualitative research besides a literary one, so I did not know what I should do. When I found out I had to code and then make networks of the codes, I found it pretty interesting. The coding process was pretty easy besides the occasional thought process of finding the right word for a code. During the network process, I found out that I made some codes too broad and should split them up. This was again a very tedious process, but necessary. Next time I will try and make the codes very small and niche. Then I will make bigger codes out of them and into networks. Hopefully, this will save some time. The biggest problem was that the translation of the Dutch word ‘vinden’ was translated wrong in my head and I put it into the research question. This meant that rather than finding out the objective views of pharmacists my research question entailed that I had to find out how they felt about the changes. If this could be done was questionable because of the data I had and due to time constraints and the paper already being dedicated to the perspective question an unorthodox change was made to the research question. Next time I will look at the question and see if what the question means is what I want to research.

RESEARCH FINDINGS

Research Findings

Based on the findings of the transcripts, the initial template from the literature review was modified. The final template, available in Tables and Figures, consists of 42 codes, 15 subthemes, and 4 overarching themes. Notably, there were 67 codes identified from the transcripts, but codes that are not in the table are codes that influence certain other codes and play a role in understanding the overall picture such as sustainability or floor experience. The codes in the table, with help from quotes from interviews, are explained in this section. Moreover, how Dutch pharmacists perceive changes and value creation due to generic medicine proliferation in the post-patent market and each theme is discussed in this chapter helps answer the question.

Code	Subtheme	Theme
Market mechanism	Cheaper medicine	Economic value
Bargaining position		
Cost structure		
Production location		
Sustainability		
Preference policy	Reimbursement	
Switching		
Medical neccesity		
Shortages		
Switching	Discounts	
Bargaining position		
Spillage	Extra costs	
Increased medicine costs		
Side effects	Substance quality	Quality of patient care
Strategic alliances		
Standards		
Patient Uncertainty	Switching	
Medication errors		
Progression of disease		
Packaging		
Margins	Profit	
Information offerings	Service	
Refresher course		
Branding		

Substance quality	Dosage forms	
Competition		
Unclear information from insurance companies	Administration work	Time
Coordination		
Stock problems		
Switching	Back office	
Shortages		
Medical necessity		
Connotation	Explaining to patients	
Confusion		
Habituation		
Preference Policy		
Switching	Stock problems	Logistics
Medical necessity		
Shortages	Delivery of medicine	
Pharmaceutic delivery		
Uncertainty of Contract		

Table 3~~2~~ Deductive Table from Data

Economic Value

Economical value is perceived as a very prominent factor since most participants mentioned this aspect first when asked what has changed in the post-patent market. As stated earlier the main strategy of GDPE is to offer lower prices and thus secure the market share. These low prices and discounts were instantly mentioned by the pharmacists emphasizing their importance. Most pharmacists also mentioned that the economic value is heavily influenced by the preference policy and is different compared to the situation before this policy. The proliferation of generic medicine is perceived as a possible positive influence on the profit margins, this depends on multiple factors which are discussed further in this chapter. Furthermore, economic value from profit margins is perceived by Dutch pharmacists to be a value generated by generic medicine proliferation in the post-patent market. An overview of this theme is available in Appendix M.

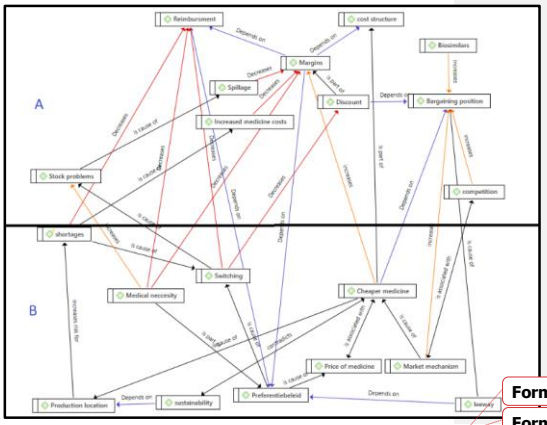

Figure 2 Overview of Theme Economic Value

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Cheaper Medicine. The pharmacists responded when asked about the prices of GDPE that they have dropped significantly. The price drops were influenced by multiple factors. The bargaining position of the insurance companies has increased through the competition of GDPE. However, there could already exist competition when me-too, medicine that can be prescribed for the same disease, is involved. Moreover, prices of medicines decrease even more because of the preference policy. Prices are also lower because of the production location of GDPE. However, the influence of cheaper medicine on the profitability of a pharmacy depends on the cost structure of a pharmacy. This is explained by participant 2 as the following:

> So we then try to keep the costs as low as possible so that the hospital keeps as much of that €5,000 as possible. Yes, because that's just a fixed amount. You just get a fixed amount, €5,000 for example. Well, the less you incur, the more you have left over and the more you can put that into treatments where the price isn't so great. Or that improves your quality or improves the patient experience. So, as a pharmacy, you try to conclude contracts as cheaply or as well as possible, but there are also other elements where you conclude a contract, for example. In our hospital, we think it's very important that medicines have a barcode. (p. 2)

An interesting aspect that was mentioned by some pharmacists was sustainability. Cheaper medicine would push the production location to China or India. In these countries, there is less effort being put into being sustainable. Moreover, importing from these countries was also seen as less sustainable. However, when making a deal for a new contract it is hard to precisely tell how sustainable a company was. This is because the origin of medicine was hard to pin down. Pharmacist 4 first introduced this code and mentioned this about it:

> Yes, well, but what? What you are increasingly looking at when purchasing is also the sustainability of uh, production and transport. Yes, so if you have to let something come from China or have it come from India, it is less sustainable than facilitating it in Europe. So only the price per cup that works in India and China is much lower than the price per cup in Europe. So that's actually where that's where we're looking for a balance, so to speak. but what would be possible. (p. 4)

Reimbursement. Reimbursement of medicine is provided through insurance companies and depends on a couple of factors. Most of the products in pharmacies are part of the preference policy and thus rules of this policy play a big part in reimbursement. If a pharmacy through switching, shortages, or medical necessity provided patients with medicine that wasn't preferent the reimbursement it got from insurance companies was affected. The pharmacy had to hit a certain percentage of preferred medicine to get a certain reimbursement.

Discount. This code did not mean the discounts achieved by the insurance companies but rather the discounts which could be achieved by the pharmacies. Participant 7 gave this reaction when asked about discounts and rebates:

> Yes, but that's almost pointless because you can only make a deal for the so-called free space. So for an insurer where there is no preference. But because that is now gradually disappearing everywhere. There is no free space left. But so there is no more trading either. What you get as a result is that actually, everything is stuck. (p. 3)

The only way pharmacies can profit from discounts is if there exists leeway. The pharmacists mention that this only happens when the pharmacy has products that are not in the preference policy. If there is leeway then the pharmacies have a better bargaining position to get those discounts from GDPE.

Pharmacists also mentioned that the amount of competition mattered to the discounts offered. If there only exists one GDPE for the medicine because the margins of the medicine were very low. Then the GDPE isn't incentivized to offer discounts. It was further mentioned that the same was the case with branded medicine.

Extra Costs. Extra costs existed of spillage and extra medicine costs. Spillage occurs because of the inefficiency of pharmacy stocks. Pharmacists mentioned that the cause was medicine switching. For example, pharmacist 6 says this about switching: "A bit more of an inventory policy. Because you also need to have something in stock of everything. So you have a lot more spillage." (p. 15) The root of the problem is not only the switching but also as pharmacist 7 explains:

> What you really should watch out for is that you don't have too much of the brand lying around, because you will not know or you don't know if its patent expires, maybe a suspicion, but often you don't even know that and then it's suddenly out of patent. And if you have a drawer full of branded medicine, you will never get rid of it in your life. (p. 1)

Medicine costs can increase if there are shortages and the pharmacists has to pay more for the medicine abroad. However, there is some discourse on whether GDPE have caused these shortages but this is discussed later.

Quality of Patient Care

The pharmacists made clear that the product of the pharmacy is not the medicine provided to the patient, but the overall quality of care provided. This entails many more factors than just the medicine itself. GDPE have caused the accessibility to increase but other factors of quality of patient care to decrease. The quality of patient care is one of the values Dutch pharmacists identified changes when generic medicine proliferate the post-patent market. This theme has further been subcategorized into sub-themes substance quality, switching, profit, service, and dosage forms. The overview is available in Appendix M.

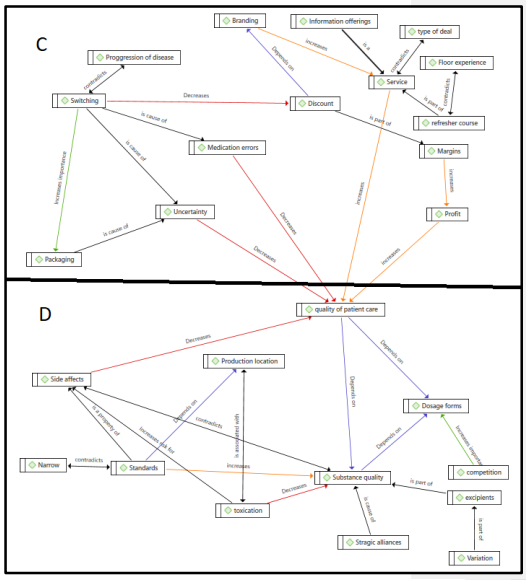

Figure 3 Overview of Theme Quality of Patient Care

Substance Quality. The substance is the core of the medicine. This substance was the part of the medicine that was patented and after the patent expires GDPE have the opportunity to profit from the substance. When asked about the quality of the medicine all pharmacists answered that there existed no significant differences in bio-equivalency between the generic and branded medicine. For a GDPE to be able to use the substance of the medicine they have to prove that their product is bio-equivalent to the branded medicine. Because of these standards, there cannot be a difference in substance quality. One pharmacist did mention that GDPE have fewer solid tests because of their product location. However, did this not affect the substance quality but only the recalls of the product. For example, pharmacist 2 mentioned this about substance quality:

> Well, there are guidelines for. So, you have to be admitted to the European market anyway. Yeah, so you already have certain quality standards that a medicine must meet. GMP has to be created. It must contain at least 95% of the active substances. So, I guess it is. I think that in itself the rules are tight enough to say that's just as good. (p. 7)

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Some pharmacists did have some concerns with the toxication that occurred more often with generic medicine. They thought it was due to the location of the production and the ethics of these locations. Moreover, there was also concern with the side effects that were also more apparent with generic medicine. However, this was attributed to the excipients and one pharmacist mentioned that the side effects same as the substance would be examined.:

> It could be that then that's just a variation with excipients for example. That then maybe you see some other side effects, but that's being investigated. And that's also presented for judgment to the through the registration file to the EMA or FTE. (Participant 1, p. 6)

Pharmacists also attributed that the substance quality depended on the dosage form. The efficiency of the dosage form mattered to how effective the substance was.

Switching. Switching in itself does not affect the overall quality of patient care, besides the agitation it creates for the patients. Switching was presumed to be inherent to the post-patent market, because before you only had one product. Pharmacists mentioned that switching caused patients uncertainty when getting their medicine and this decreased patient care. Furthermore, switching increased the importance of packaging. Pharmacist 5 mentioned this about packaging:

> It is like that. When it was still a specialty market yeah it was much clearer for people. Oh, I have to take this for my heart and this is for my lungs and this is for my blood. But when it all became generic. For example, Sandoz has a generic line. All those boxes look the same. (p. 12)

Additionally, one pharmacist said that more medication errors happen because of switching. However, one pharmacist mentioned that the progression of diseases contradicts the switching factor. It could be that patients were not affected by the switching but by the disease itself.

Profit. A few pharmacists when talking about profit mentioned that when profit was being made in the pharmacy or even for the overall healthcare in the Netherlands then this profit was used to help improve the quality of the patient care. If one treatment was not very expensive this margin could be used to help finance another treatment that was too expensive.

Service. The pharmacists when asked about the quality of the services provided to them by pharmaceutical companies talked about two different services. Firstly, they mentioned refresher courses that helped the abilities of the pharmacist and personnel. However, one pharmacist mentioned that the personnel if not offered this service just learned about the product during work. Secondly, the pharmaceutical companies offered certain information offerings with their products. These offerings helped patients understand their medication better.

Services were offered only with a certain type of deal and were influenced by the branding of the pharmaceutical companies. However, not all medicine is appropriate for service offerings. The pharmacists said that the number of services offered depended also on their branding. Further reasons for service are mentioned by participant 9:

> With tablets and such, you don't really have that because tablets are very straightforward. But you have it with inhalation medication, for example. When a new inhaler is being launched and then you get an email or a letter, do you also want some trial inhalers? And you can then use it to explain at the counter how that inhaler works. Do you know that's how you are convinced. (p. 4)

Dosage Forms. Dosage forms are the form the medicine is distributed in. There are many factors that medicine could differ in dosage forms. The pharmacists mentioned that this mostly played a role in inhalators, where there sometimes confusion was created through switching the dosage form, which influenced patient care. Further mentioned differences were medicine for rheumatism patients. The form of the generic medicine was even hard for the pharmacist to open and it would be impossible for the patients themselves to open the medicine. Why the quality of dosage forms was explained by participant 1:

> Disposable syringe is often self-developed by the manufacturer and a substance itself that is often from a registration file. But the form of administration the disposable syringe for example that yes that if you just introduce a new drug, then you have a version zero the form of administration. And that in itself doesn't have to be a problem. Suppose a drug, the innovator, he then has three versions so that disposable syringe has then gotten better and better. The generic has one. So that's something fragile or not so well developed yet. But yes, if you have the drug administered by a nurse at home? Yes yes, they can. Those are professionals. Yeah they do train on that on the version one because yeah they have also given the version one of the originator. (p. 8)

Time

“So a small amount of discounts when a patent expires. But I think that the biggest costs mainly lay in the loss of time. Yeah and in patient care that's declining and all the time you have to

invest there." (Participant 6, p. 15) It becomes clear from the pharmacists that the workload is potentially the biggest element that is increased by the patent expiry. In this section the pharmacists' perspective on the factors that influence the extra time they have to put into work after generic medicine proliferate the market. The extra time it takes due to generic medicine proliferation is perceived to be a negative value in the post-patent market. For further illustration of this theme Appendix M gives a overview of the theme with the different codes.

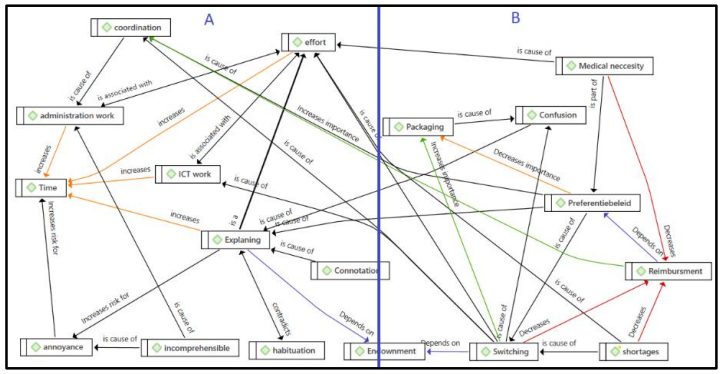

Figure 4 Overview of Theme Time

~~*Figure 5 Overview of Theme Time*~~

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Administration Work. The first factor that influences time according to the pharmacists is administration work. Two reasons were given why pharmacists have to spend extra time when a patent expires. Firstly, the prices and status of products have to be amended and this has to be done every time an insurance company switches its preferent. Secondly, pharmacists have to be wary about the stock of the pharmacy to not run the risk of spillage. The reason for the dangers for the pharmacy stocks are discussed later in section Delivery of Medicine. To control their stock the pharmacists, have to spend time monitoring. Participant 2 stated that:

> You have administration over that. Prices must be adjusted. So yes, for a pharmacy, it's never nice to change a lot, because you see, you have to change that entire administration and your entire inventory management system every time. (p. 6)

> Yes, you should always be very careful that when there are new lists you'll sell out the old brands and put on a new one. You should also pay extra attention. Yes, well, that can all vary and, in addition, the focus lists can also vary by health insurer. (Pharmacist 5, p. 10)

Back Office. Secondly, pharmacists mention needing to put in extra effort in regards to trying to solve a medicine problem. Switches cause the need for extra coordination between pharmacists, patients, and doctors. This causes pharmacists to invest extra time to provide the same quality of care as before the patent expiry. Additionally, when a medicine isn't available any more pharmacists have to look abroad to still provide care for the patient. These shortages are partly associated with the proliferation of generic medicine, but this is discussed in Delivery of Medicine. Lastly, when a patient has medical necessity for a certain type of medicine. This can either be for the branded medicine but can also be for another generic medicine. Pharmacists have to spend time first coordinating with the doctor who prescribed the particular medicine and then have to discuss it with the patient. This is further incentivized by the percentage mentioned before in Reimbursement. Participant 4 gives a good example of the extra time it takes to understand the changes:

> When the Paracetemol Sinaspril goes out of patent, there are therefore several parties that can bring paracetamol on the market and that price will fall. Market forces. Then the health insurer decides which says I want from manufacturer two, I want I made the best contract agreement with that manufacturer. So that's an agreement between health insurer and manufacturer, the pharmacy isn't even among that at all. So we don't know those agreements either. So it may well be that for those who want to come to you in the uh in the price list, you have the Z-index pharmacy purchase price list, the highest in the list, which is preferred because the health insurer has been able to make the best agreement with it. We come across that kind of jokes. (p. 2)

Explaining to Patients. Lastly, this was emphasized by all pharmacists as the main contributor to the increase in time. For instance, when talking about the quality of the substance a pharmacist answered with this: "Not in my eyes, but in the eyes of patients yes." (Participant 10, p. 4) Even while GDPE have to pass a very extensive test in the eyes of the patients they still are not the same. Some pharmacists mention that this is because the patients have a certain negative connotation of the generic medicine. Pharmacists then have to explain that the generic medicine are indeed the same as branded medicine. Furthermore, pharmacists have to explain the confusion that arises with medicine switching and packaging. For instance, participant 10 mentioned this about explaining: "But at the counter of the outpatient pharmacy that leads to a lot of discussions with some patients, which often takes a lot of time and we have quite a few patients who refuse the new box." (p. 4) Medicine switching because of the simple fact that they suddenly have a different medicine and the patients don't understand

why. The preference policy was attributed to causing the switching and pharmacists thus had to also explain this concept to their patients. The reason for the confusion of packaging has been explained by the quote in section Switching. Yet, one pharmacist did mention that the time needed to explain these factors to patients decreased compared to the beginning of the enactment of the preference policy.

Logistics

For the operationality of the pharmacy, it must work efficiently. The pharmacists mentioned that when generic medicine proliferate the market certain factors affecting the logistics of the pharmacy change. The logistics were perceived to be a negative value after generic medicine proliferate the market because the pharmacy worked inefficiently after their proliferation. An overview of the theme Logistics is available in Appendix M.

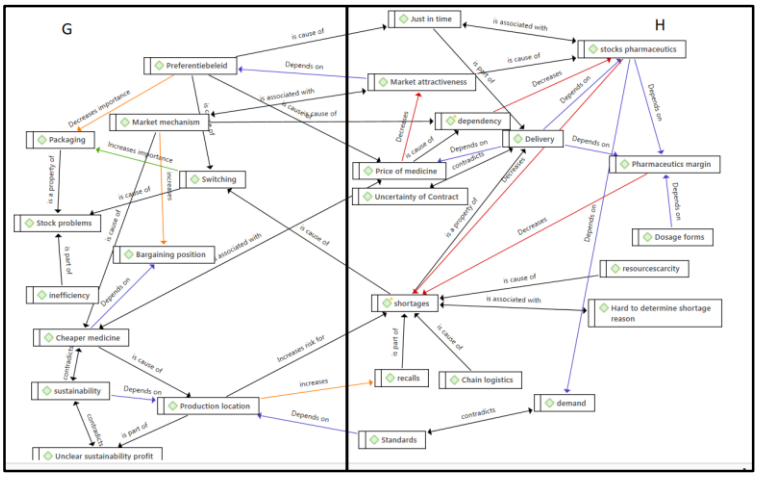

Figure 5 Overview of Theme Logistics

~~***Figure 6 Overview of Theme Logistics***~~

Stock Problems. Pharmacies have a stock of medicines that are used to quickly provide their patients with medicine. If they did not have these stocks then the patients would have to wait for their products. Therefore, pharmacies have medicine in stock that patients use. However, pharmacists mentioned that the preference policy has created that insurance companies can switch freely between medicines. When this happens the pharmacy is left with the medicines which are not preferent. This creates big problems in the cabinets of the

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pharmacies and their available space. Pharmacists mentioned that they sometimes have 10 different generic medicines of one substance. Moreover, when a patent expires the very expensive branded medicine is left in the cabinets. Overall it creates a problem with the stocks of the pharmacy.

Delivery of Medicine. Delivery of the medicine is a very important factor in the logistics of the pharmacy. If a medicine cannot be delivered then the pharmacy cannot provide the patient its medicine. The most important factor for delivery is medicine shortages. Firstly, it is important to mention that some pharmacists perceive the reason for shortages hard to determine. It could for instance be that there exists a resource shortage or that there is something wrong with the chain logistics. However, one element of GDPE does cause shortages. Because of the cheaper medicine, GDPE produce their products in location, which as mentioned by a couple of pharmacists increases the number of recalls. Furthermore, preference policy ensures that the prices of medicine are the lowest they can be. For pharmaceutical companies, this means that the margins they can earn in the Dutch market are very low. This causes the market to not be very attractive for GDPE and pushes GDPE who cannot get a contract from an insurance company out of the market.

One pharmacist mentioned that this causes that for some medicine only one GDPE delivers the medicine. This dependency on one GDPE is fine as long as this company can deliver the medicine. For example, pharmacist 1 mentioned this: “Not very interesting. And then it can be said that it isn’t a very big drama if that drug is not there. if there are other generic.” (p. 4) However, GDPE have a just-in-time policy, which affects the amount of pharmaceutical stocks. Moreover, the pharmacists mention that the stock of the pharmaceutics also depends on the pharmaceutical margins, and as mentioned before the margins in the Dutch market are low. Additionally, in the Dutch market, GDPE are not certain whether they will have the contract the next year. When they don’t know if they can acquire the contract it isn’t logical for them to already buy resources for producing medicine. This causes further implications for delivery. Participant 10 gave a somewhat complete overview of the perspectives on this issue:

> Well, overall the delivery of the patented drugs is better. Yes, generally yes. There are exceptions, but yeah. I think the margins are simply higher, so they can also have more in stock, and with Generics if the

> price is already very low and they lose a bidding round. Yeah, then it can cost a company a lot of money. Or If they, therefore, have too large stocks and no one is going to purchase it, that is a big cost for them. Well, for a company, I think it's a specialty firm that has enough euro's to absorb that, so I think that the ordinary couple will arrange their logistics much tighter, the generic ones, so that if something in the chain does not go well, they will quickly have a shortage. Because that's where you can, of course, save money in the chain. I think that, because of fewer stocks, that is much more the just in time. Yes, and if something goes wrong just in time, the consequences of delivery problems are very significant. (p. 3)

Discussion of the Findings

The findings of this research have provided insights into the perspectives of Dutch pharmacists on changes and value creation of generic medicine proliferation in the post-patent market.

The pharmacists perceive GDPE not having the same marketing and research and development costs as the innovators (Dylst, 2013). When generic medicine proliferate the market the economic consequences for the pharmacy largely depend on whether the medicine is included in the preference policy of the insurance companies. This is also mentioned in the literature by Grupstra (2022) and van de Water (2019). However, when the medicine is not included in the preference policy of the insurance companies the pharmacies may profit by getting discounts. This existing leeway is under-highlighted in the current literature. This leeway is however disappearing because, as pharmacists mentioned, insurance companies are including more and more medicine in their policies. The pharmacists also experience extra costs due to the increased spillage (Grupstra, 2022). The extra costs made for acquiring medicine abroad were not seen as a huge problem. This was possibly due to the fact that generic medicine is very cheap. Generic medicine proliferation is not perceived to create economic value. But the change it brings results into shortages and frequent medicine switching which causes increased costs to the pharmacies.

One of the theoretical consequences of cheaper medicine due to generic medicine proliferation is the increased accessibility for patients (Kamat, 2022). Accessibility is one of the dimensions of the quality of patient care and the pharmacists agree with the literature that this increase is a very important factor (Halsall et al., 2012; Kamat, 2022). However, increased time due to generic medicine proliferation can cause the accessibility to decrease due to pharmacists having less time for helping their patients.

The second dimension, effectiveness, is however decreased due to psychological factors such as switching and connotation of patients (Dunne, 2015; Grupstra, 2022; Tuleu, 2021). Switching causes patients to be confused and uncertain about their medication. This argument might however be contradicted by patients getting used to the constant switching and one pharmacist also suggested this. Secondly, the connotation of patient of generic medicine causes the patients to not trust the medicine and this has a negative influence on the treatment efficiency.

Generally, the pharmacists do not see generic medicine to be worse than branded medicine because of the tests the medicine has to pass through (Tuleu, 2021). Patient's safety (due to the presence of toxic residues as a result of the chosen fabrication process) can however become an issue, mostly attributed to the location of production. This leads to more recalls because the medicine is tested again in Europe.

Dosage forms were seen as a factor that influenced the quality of generic medicine and the dosage forms of generic medicine were seen as poorer quality. This was attributed to the fact that GDPE only focus on a strategy where they have only have one version of the dosage form available. In the literature, it was mentioned that service to the patients was one of the value creations of GDPE, but pharmacists did not perceive this as valuable to the quality of patient care (Kamat, 2022).

The last dimension of perception of experience was decreased by the generic medicine proliferation both for patients and for pharmacists (Grupstra, 2022). Patients have problems with distinguishing between the packaging of generic medicine which sometimes confuses them due to very small differences between the different packaging. Furthermore, the shortages and increased switching causes the patients to have different brand of products (or even sometimes no medicine at all). Pharmacists have to deal with increased confusion due to unclearness about agreements between GDPE and insurance companies. Moreover, complaining and angry patients have negative consequences for the overall job satisfaction of pharmacists.

The most perceived negative consequence of generic medicine proliferation was the amount of extra work. Mostly, extra work was perceived to be caused by needing to explain

different factors that arise (Grupstra, 2022; Dunne,2015). The amount of explaining is heavily influenced by the current situation in the Netherlands, namely the preference policy. Pharmacists have to explain the constant switching by the insurance companies. But as mentioned before habituation counters this argument. The connotation of patients regarding generic medicine heavily increases the amount of time it takes the pharmacist to convince certain patients (Dunne, 2015). Other factors are less prevalent in the literature but exist of many different time-consuming tasks (Grupstra, 2022).

The most important driver which is also mentioned in the literature is the extra administrative work for pharmacies. This even starts before the patent expires because the pharmacists need to be aware of when a patent expires, which is not always actively communicated. Otherwise, the medicine left in stock will decrease in economic value: prices will drop, most likely it will not be dispended or fully reimbursed. Furthermore, there is much more need for coordination between doctors, insurance companies, and pharmacist mostly due to reimbursement. Moreover, every time insurance companies switch due to GDPE offering them a better deal which results in the pharmacies have to adjust their systems.

Finally, pharmacists perceived logistics to be another theme that was negatively influenced by generic medicine proliferation (Grupstra, 2022). Some pharmacists mentioned that due to the constant switching, they were left with many different generic medicines in their stock. Besides increasing the risk this creates problems for small pharmacies with not a lot of shelf space. However, this was not seen as a very significant factor.

Delivery of medicine was the more significant factor that changed. Firstly, pharmacists did not fully perceive GDPE to be the cause of the shortages. The current preference policy was seen as a bigger attribution than the attribution of GDPE. However, pharmacists did perceive that due to market mechanisms, the price was pushed down so low that for some medicines there only was one GDPE left available on the Dutch market. Therefore, the delivery of some medicines to the pharmacies is fully dependent on this one GDPE. Before the patent expiry, pharmacies are also dependent on one manufacturer, but innovators have more reason for delivery because bigger margins. Moreover, it is uncertain for GDPE if they can get the contract from insurance companies for a next period. Therefore, they cannot buy the resources

beforehand and have a method of delivering just-in-time. This method was perceived to be a cause of shortages and, logically, this increases the risks for shortages.

As mentioned in Kamat (2022) GDPE focus on timely delivery, but this factor is not perceived to be a generated value. Most likely, this is because they already had a timely delivery and do not see a difference. Another aspect not mentioned by pharmacists was the increased practicality of using the substance name (Aronson, 2004; Merchant 2020). This could still be a positive factor but is overlooked because of the many negative factors.

Analysis of Key Findings

Stakeholder group	**Value dimension**	**Value created and activities that create them**	**Value dimension**	**Value destroyed and activities that lead to them**
Pharmacists	Financial:	Profit due to cheaper medicine if the cost-structure allows it, discounts if there is enough leeway	Financial:	Less reliable medicine, increased costs due to increased medicine costs and spillage, danger for less reimbursement due to multiple factors, increased inability to deliver medicine due to shortages
	Nonfinancial:	Patients accessibility to medicine	Nonfinancial:	Increased side effects, patients trust in generic medicine is lower, stock space problems, sustainability of GDPE is lower
	Time:	-	Time:	Increased

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	administration work, increased back office work, increased time explaining to patients

Table 4 Pharmacists' perceived value due to proliferation of generic medicine in the post-patent market

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These are the findings of the research put into the framework from Haksever (2004). With this framework the propositions in the literature review section can be answered. The first proposition is: Dutch pharmacists perceive the proliferation of generic medicine in the post-patent market in the financial dimension as a value creation. The pharmacists do not see the proliferation of generic medicine as a value creation, but rather as a value destruction. Pharmacists can only take advantage of proliferation of generic medicine when there exists enough leeway to make deals with the GDPE or if the cost structure of the pharmacy allows the pharmacists to take advantage of the cheaper medicine. However, this possible advantage is not sufficient to outweigh the increased recalls, increased medicine costs when getting them abroad, increased spillage and increased inability to deliver medicine due to increased shortages.

The second proposition, Dutch pharmacists perceive the proliferation of generic medicine in the post-patent market in the nonfinancial dimension as a value creation, is true. The increased accessibility of patients is perceived to be so important that the other factors do not outweigh it. Increased side effects can also be caused by the progression of the disease and not the generic medicine, the patients trust in the generic medicine is a relevant factor, but patients get used to the new medicine and their trust grows over time. Stock space problems are a relatively small problem and only effects small pharmacies. The sustainability factor is also important to pharmacists and they perceive the GDPE to be less sustainable, but sustainability is hard to fully determine due to the unclear logistics of both the GDPE and branded companies.

The last proposition which was: Dutch pharmacists perceive the proliferation of generic medicine in the post-patent market in the time dimension as a value creation. This proposition is easily answerable because no factors creating value in the time dimension were identified. In this dimension value was mostly destroyed. Firstly, due to increased administration work and increased back office work. Secondly, due to the increased time needed to explain to patients.

However, due to patients getting used to the new generic medicine the time needed for explaining will decrease over time.

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This research set out to find out what the perspectives of Dutch pharmacists on changes and value creation of generic medicine proliferation are in the post-patent market. Pharmacists were interviewed with questions embedded in the literature. The following paragraphs summarize the literature review and the results found.

Key Findings: Literature Landscape

The proliferation of generic medicine has caused the price of medicine to drop significantly and this creates an opportunity for huge profits (Kamat, 2022). These profits in the Dutch market are taken by the insurance companies, which benefits overall patient care (Grupstra, 2022). This contradicts the view of GDPE, who offer these discounts to the distributors as well (Kamat, 2022). The quality of patient care is decreased because of generic medicine (Tuleu, 2021). While the substance quality should not be different due to tests, psychological factors influence clinical effectiveness. Additionally, the quality is decreased cause of the side effects of generic medicine and the danger of not being bioequivalent to other generic medicine. The operationality of the pharmacy is decreased mostly cause of the extra amount of work generic medicines cause (Dunne, 2015; Grupstra, 2022). The extra work is caused cause of the need for extra explanation to the patients and administrative work (Grupstra, 2022). However, less confusion through the substance names improves work effectiveness (Merchant, 2020). There is a debate concerning GDPE causing the shortages. On one hand, GDPE perceive they have timely delivery, on the other the small margins in the Dutch market result the market not to be attractive for GDPE (Kamat, 2022; Grupstra, 2022).

Key Findings: Current Study

The key findings of the current study are that A) the profits of the pharmacy are only affected by the cheaper medicine when the cost structure permits it; B) the overall quality of patient care has increased due to generic medicines; C) pharmacies have to spend extra time-solving problems that arise when generic medicine proliferate the market and that D) pharmacies also experience problems regarding logistics.

A. Reimbursement and discounts don't change when generic medicine proliferate the market. When enough effort is invested the reimbursement is the same and only when there exists leeway to make a deal with GDPE discounts are an important factor. However, pharmacies do have extra costs because of the proliferation of generic medicine. Firstly, there is increased spillage, and this cannot be reimbursed and is attributed as a very important factor for increased costs. Secondly, they have to find more expensive medicine abroad to provide care to patients. In conclusion, the profits of the pharmacy are only affected by the cheaper medicine when the cost structure permits it.

B. Although there can be a decrease in the substance quality due to toxic residues and (perceived) increased side effects, but tests and standards should decrease these factors. Moreover, switching can cause uncertainty and errors and dosage forms are poorer with generic medicine and affected the efficacy of the treatment. However, patients have better accessibility to medicine and more healthcare can be provided due to cheaper medicine depending on the cost structure of the pharmacy. Overall, the overall quality of patient care has increased due to generic medicine.

C. Pharmacies have to spend extra time-solving problems that arise when generic medicine proliferate the market. Firstly, they have to do extra administrative work and ICT work. Secondly, pharmacists have to fix extra problems relating to switching, shortages, and medical necessity. Lastly and most importantly, time spent explaining the changes to patients increases massively.

D. Pharmacies also have been experiencing problems regarding logistics. The presence of many different generic medicines in the pharmacy cause for problems in the stock space of the pharmacies. More importantly, GDPE have very low profit in the Dutch market due to preference policy and this causes a danger of a shortage of medicines with

generic medicine. Some medicines are even dependent on only one GDPE manufacturer which increases the risk and logistic problems.

Comparison: Literature and Study Findings

This study's findings nuance the situation in the Netherlands regarding economic factors more than the current literature. Pharmacies in the Netherlands don't fully gain the advantages from the efficient methods of GDPE. But this does depend on factors such as leeway and cost structure. If these factors are positive, then pharmacies do benefit. Spillage and increased medicine costs are mentioned in the literature.

The findings of this research and the literature are very similar regarding the effect of GDPE on the quality of patient care. The only element that was missing was the increased risk for toxic residues due to the production location.

Differences in the literature and the findings of this study are apparent regarding pharmaceutical operations. The extra administrative work and time needed to explain the changes to patients have been mentioned in the literature. However, the time needed to fix problems regarding switches and medical necessity is under-exposed in the literature. The same is for the problem of the storage space in the pharmacy. While not a major problem for all pharmacies, pharmacies that have very little storage space in their pharmacy can have issues with the many generic medicine on their shelves. Lastly, the timely delivery of GDPE was hardly mentioned in the interviews and most of the pharmacists perceived GDPE to cause problems regarding shortages. Still, other factors for shortages were mentioned.

Answering the Research Question

First the sub-questions are answered and then the main research question is discussed.

Sub-question 1

The first sub-question is: How do pharmacists perceive economic changes in the Dutch post-patent market?

Pharmacists perceive that GDPE create value through cheaper medicine. But the pharmacy itself is not affected by this cheaper medicine. Preference policy allows little leeway for the pharmacists to profit from the cheaper medicine offered. Only when the pharmacy has a

different cost structure it can take advantage of the cheap medicine. Furthermore, pharmacists perceive GDPE to cause negative externalities that influence the profitability of the pharmacy, such as spillage.

Sub-question 2

The next sub-question is: how do pharmacists perceive changes in the quality of patient care in the Dutch post-patent market?

Pharmacists perceive that the quality of the substance stays the same due to the tests. A risk for a problem with toxicity does exist due to the production location. Furthermore, the increased switching is seen as causing patient uncertainty and medication errors. Moreover, poorer dosage forms are seen to affect the acceptability of the medicine. Therefore, clinical efficiency is lower. However, the lower price cause pharmacies to be able to provide more care.

Sub-question 3

The last sub-question is: how do pharmacists perceive changes in the functioning of the pharmacy in the Dutch post-patent market?

Pharmacists perceive two themes affecting the functioning of the pharmacy. The first theme is time, and this is perceived to exist of three different factors: administration work, back-office work, and explaining work. When generic medicine proliferate the market, this causes pharmacies extra work setting up the ICT, and the administrative work is further increased by the switching caused by preference policy. Furthermore, pharmacists perceive that switching, shortages, and medical necessity are more apparent in the post-patent market. This causes the pharmacists extra work through needing to solve problems that are caused by those factors. The most important factor pharmacists perceive changes is the extra time pharmacists and the personnel of the pharmacy need to take to explain changes in the post-patent market to patients. This is due to two factors: negative connotation of generic medicine and confusion around the change.

Main Research Question

How do Dutch pharmacists perceive changes and value creation of generic medicine proliferation in the post-patent market?

Firstly, to answer this question it must be mentioned that the job of the pharmacists is one with a duality. Pharmacists perceive to have two roles: Deliver care to the patients and manage the pharmacy (Van De Pol et al., 2019). Delivering care to their patients is perceived to be increased. The fact that lower priced medicine allows the pharmacy to deliver more care to their patients is perceived to overshadow all other negative effects coming with the proliferation of generic medicine. The second job is very negatively affected by the proliferation of generic medicine. Firstly, cheaper medicines do not affect the profitability of most pharmacies, and generic medicine cause even more spillage. Secondly, the time it costs for pharmacists to deliver the same amount of care is perceived to be increased significantly due to factors costing more time such as explaining and administrative work. Most pharmacists perceive caregiving to be the most important role and thus perceive the generic medicine proliferation as a positive influence.

Implications: Marketing Professionals

The fact, that pharmacists even though many negative externalities diminish their efficiency still see generic medicine proliferation as a positive influence, implies that for a profession that has two roles one factor can mean much more than other. Marketing professionals can use this fact to better create value for their customers. By understanding what factors weighs most in the customers mind, a marketing professional can improve the value the customers perceive.

The value you perceive to create is not always the value that is created in a market. These markets can differ or there can exist more layers between you and the targeted customer. When trying to create value for your customers marketing professionals should look at what the specific market does to their value and if the value they create remains the same in the specific market. By doing so marketing professionals can better target customers in specific markets.

Recommendations: Future Research

This research took place specifically in the Netherlands and is specific to the Dutch situation. Future research can look at how value is perceived in an out-of-pocket market or a market where brands are on the prescription. The perception of these markets could differ and

probably do differ from the Dutch market. Furthermore, it is also interesting to look at similar markets and analyse how the tendering policies differ in GDPE value generation. Kamat (2022) also mentioned that research could be done into specific markets and this is the same with this study.

Different stakeholders' perspectives in the Netherlands are also interesting to research, this study only addressed the pharmacists' perspectives. Because the insurance companies can have very different perceptions of GDPE' created value and probably will or have a different understanding of value creation. Furthermore, although not mentioned in Kamat (2022) as an important stakeholder group, the perspective of patients is also interesting because their perspective influences the quality of patient care. Insurance companies and patients can further contribute to identifying inequities and bring more nuance.

Recommendations: Relevant Industries

Relevant industries which could benefit from this paper are the pharmaceutical industry, insurance companies, the Ministry of Health, and pharmacists. Understanding pharmacists' perspectives on this major change for pharmacies can improve the efficiency of these industries. Pharmaceutical industry can look at this research and show to insurance companies that they offer value for pharmacists and have an advantage in acquiring the contracts. Insurance companies and the Ministry of Health can improve the quality of patient care through a better understanding of generic medicine. If they allow better contracts for pharmacists, then the pharmacists can have more time attending their patients and provide better care. Pharmacists can improve their understanding of other pharmacists and how generally generic medicine proliferation is perceived. With this, they can better deal with the challenges arising from generic medicine proliferation or coordinate with insurance companies and prevent issues from arising. For example, a conference with insurance companies, GDPE representatives, and pharmacists can help with the issues discussed in this paper.

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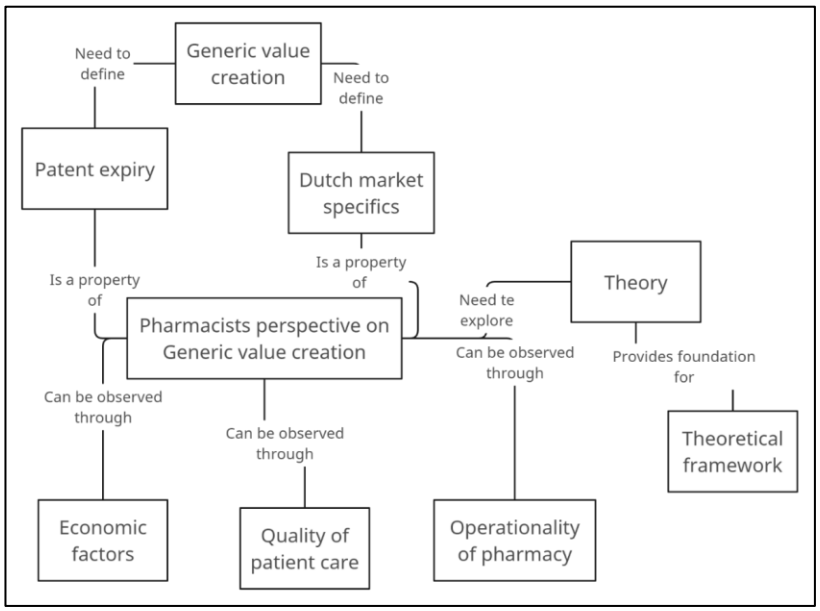
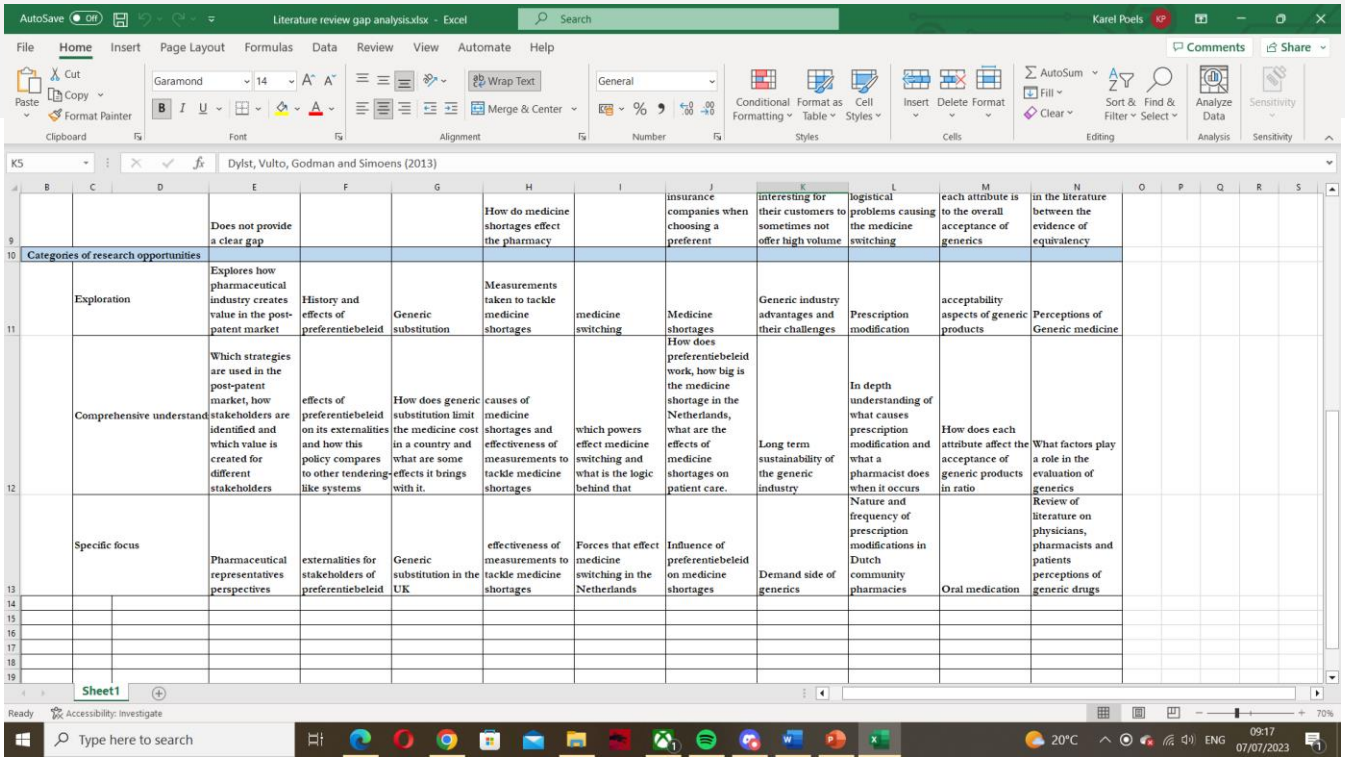
Appendix A: Literature Review Mapping



Appendix B: Literature Gap Analysis



			Does not provide a clear gap			How do medicine shortages effect the pharmacy		insurance companies when choosing a preferent	interesting for their customers to sometimes not offer high volume	logistical problems causing the medicine switching	each attribute is to the overall acceptance of generics	in the literature between the evidence of equivalency	
Categories of research opportunities													
	Exploration		Explores how pharmaceutical industry creates value in the post-patent market	History and effects of preferentiebeleid	Generic substitution	Measurements taken to tackle medicine shortages	medicine switching	Medicine shortages	Generic industry advantages and their challenges	Prescription modification	acceptability aspects of generic products	Perceptions of Generic medicine	
	Comprehensive understand		Which strategies are used in the post-patent market, how stakeholders are identified and which value is created for different stakeholders	effects of preferentiebeleid on its externalities and how this policy compares to other tendering-like systems	How does generic substitution limit the medicine cost in a country and what are some effects it brings with it.	causes of medicine shortages and effectiveness of measurements to tackle medicine shortages	which powers effect medicine switching and what is the logic behind that	How does preferentiebeleid work, how big is the medicine shortage in the Netherlands, what are the effects of medicine shortages on patient care.	Long term sustainability of the generic industry	In depth understanding of what causes prescription modification and what a pharmacist does when it occurs	How does each attribute affect the acceptance of generic products in ratio	What factors play a role in the evaluation of generics	
	Specific focus		Pharmaceutical representatives perspectives	externalities for stakeholders of preferentiebeleid	Generic substitution in the UK	effectiveness of measurements to tackle medicine shortages	Forces that effect medicine switching in the Netherlands	Influence of preferentiebeleid on medicine shortages	Demand side of generics	Nature and frequency of prescription modifications in Dutch community pharmacies	Oral medication	Review of literature on physicians, pharmacists and patients perceptions of generic drugs	

Appendix C: Personal Interviews - Invitation Letter to Participants and Pharmacists

Dutch

Hoi lieve ouders, zouden jullie mij wat emails door kunnen sturen van apothekers die ik zou kunnen interviewen voor mijn thesis? Graag apothekers die minimaal al 10 jaar ervaring hebben. Ook graag apothekers die een goede algemene blik hebben over de apotheek.

Beste heer/mevrouw,
Ik ben een marketing bachelor student aan de Erasmus universiteit Rotterdam en ik ben bezig met een thesis over de meningen van apothekers op veranderingen die ontstaan in de post-patenten markt. Ik heb uw informatie gekregen via Harriette Poels en ik zou heel graag een interview van ongeveer een uur met u willen houden. Als u hieraan mee zou willen werken kan ik u dan bellen om een datum en een tijd af te spreken. Ik kan dan langs komen of we kunnen digitaal het interview doen. Uw inzichten kunnen een waardevolle bijdrage leveren aan mijn onderzoek. Ik kijk uit naar uw reactie en alvast bedankt voor uw moeite en tijd.
Met vriendelijke groet,
Karel Poels

English

(Hi dear parents, could you forward me some emails of pharmacists I could interview for my thesis? Like pharmacists who have at least 10 years of experience. Also like pharmacists who have a good general view about pharmacy.)

(Dear Sir/Madam,
I am a marketing bachelor student at Erasmus University Rotterdam and I am working on a thesis about the opinions of pharmacists on changes emerging in the post-patent market. I received your information through ... and I would very much like to conduct an interview of about an hour with you. If you would like to participate in this I can then call you to arrange a date and time. I can then come by or we can do the interview digitally. Your insights could be a valuable contribution to my research. I look forward to your response and thank you in advance for your effort and time.
Kind regards,
Karel Poels)

Appendix D.1: Personal Interviews - Informed Consent Form Dutch

INFORMED CONSENT FORMULIER

Naam van het onderzoeksproject	Bachelor thesis Karel Poels
Doel van het onderzoek	Dit onderzoek wordt geleid door Karel Poels. U bent van harte uitgenodigd om deel te nemen aan dit onderzoek. Het doel van dit onderzoek is om de perspectieven van apothekers vast te leggen over veranderingen in de post-patenten markt.
Gang van zaken tijdens het onderzoek	U neemt deel aan een interview waarin aan u vragen zullen worden gesteld over de effecten van de post-patenten markt op de apotheek. Een voorbeeld van een typische vraag die u zal worden gesteld: “Merkt u een verschil tussen de gepantenteerde producten en generieken omtrent medicijntekorten”. U dient tenminste 18 jaar te zijn om deel te nemen aan dit onderzoek en werkzaam te zijn in de apotheek. Tijdens het interview zal, aan de hand van een topic list, dieper worden ingegaan op mogelijke verschillen beschreven in literatuur van gepantenteerde producten en generieken. Van het interview zal een audio-opname worden gemaakt, zodat het gesprek later ad-verbum (woord voor woord) kan worden uitgewerkt. Dit transcript wordt vervolgens gebruikt in het verdere onderzoek.
Potentiële risico's en ongemakken	- Er zijn geen fysieke, juridische of economische risico's verbonden aan uw deelname aan deze studie. U hoeft geen vragen te beantwoorden die u niet wilt beantwoorden. Uw deelname is vrijwillig en u kunt uw deelname op elk gewenst moment stoppen. - Er is enig ongemak verbonden aan uw deelname aan deze studie, vanwege de gevoelige aard van het onderwerp. U hoeft geen vragen te beantwoorden die u niet wilt beantwoorden. Uw deelname is vrijwillig en u kunt uw deelname op elk gewenst moment stoppen. -Bepaalde voorbeelden die u gegeven heeft, maar niet in het transcript wil hebben, kunnen achteraf er uit worden gehaald en niet worden gebruikt in het onderzoek.

Vergoeding	U ontvangt voor deelname aan dit onderzoek geen vergoeding . Door deel te nemen aan dit onderzoek zult u meer inzicht krijgen in verschillen tussen gepantenteerde producten en generieken. Het bredere doel van dit onderzoek is: Het zorgen van beter functioneren van apotheken, zodat zij meer tijd kunnen hebben voor hun primaire taak.
Vertrouwelijkheid van gegevens	Uw privacy is en blijft maximaal beschermd. Er wordt op geen enkele wijze vertrouwelijke informatie of persoonsgegevens van of over u naar buiten gebracht, waardoor iemand u zal kunnen herkennen. Voordat onze onderzoeksgegevens naar buiten gebracht worden, worden uw gegevens **anoniem** gemaakt: geanonimiseerd. Enkele eenvoudige voorbeelden hiervan: uw naam wordt vervangen door anonieme, op zichzelf betekenisloze combinatie van getallen. uw leeftijd zelf wordt niet verwerkt, maar in een categorie geplaatst. Bijvoorbeeld: leeftijd: tussen 18-25 jaar / tussen 25-35 jaar etc. uw woonplaats wordt niet gebruikt, maar de provincie waarin u woont. Bij de start van ons onderzoek krijgt uw naam direct een **pseudoniem**; uw naam wordt gepseudonimiseerd ofwel 'versleuteld'. Op deze manier kan wel worden onderzocht wat u in het gesprek aangeeft, maar weten de getrainde onderzoekers niet dat u het bent. De onderzoeksleider is zelf verantwoordelijk voor dit pseudoniem en de sleutel en zal uw gegevens niet delen met anderen. In een publicatie zullen of anonieme gegevens of pseudoniemen worden gebruikt. De audio-opnamen, formulieren en andere documenten die in het kader van deze studie worden gemaakt of verzameld, worden opgeslagen op mijn laptop en zullen aan het einde van het thesisproces worden verwijderd. De onderzoeksgegevens worden indien nodig (bijvoorbeeld voor een controle op wetenschappelijke integriteit) en alleen in anonieme vorm ter beschikking gesteld aan personen buiten de onderzoeksgroep; in dit geval aan een supervisor van de Erasmus Universiteit Rotterdam die hiertoe bevoegdheden heeft.

Vrijwilligheid	Deelname aan dit onderzoek is geheel vrijwillig. U kunt als deelnemer uw medewerking aan het onderzoek te allen tijde stoppen, of weigeren dat uw gegevens voor het onderzoek mogen worden gebruikt, zonder opgaaf van redenen. Dit betekent dat als u voorafgaand aan het onderzoek besluit om af te zien van deelname aan dit onderzoek, dat dit op geen enkele wijze gevolgen voor u zal hebben. Tevens kunt u tot 3 werkdagen (bedenktijd) na het interview alsnog de toestemming intrekken die u hebt gegeven om gebruik te maken van uw gegevens. In deze gevallen zullen uw gegevens uit onze bestanden worden verwijderd en vernietigd. Als u tijdens het onderzoek, na de bedenktijd van 3 werkdagen, besluit om uw medewerking te staken, zal dat eveneens op geen enkele wijze gevolgen voor u hebben. Echter: de gegevens die u hebt verstrekt tot aan het moment waarop uw deelname stopt, zal in het onderzoek gebruikt worden, inclusief de bescherming van uw privacy zoals hierboven beschreven. Er worden uiteraard geen nieuwe gegevens verzameld of gebruikt. Als u besluit om te stoppen met deelname aan het onderzoek, of als u vragen of klachten heeft, of uw bezorgdheid kenbaar wilt maken, of een vorm van schade of ongemak vanwege het onderzoek, neemt u dan aub contact op met de onderzoeksleider: Karel Poels

Toestemmings-verklaring	Met uw ondertekening van dit document geeft aan dat u minstens 18 jaar oud bent; dat u goed bent geïnformeerd over het onderzoek, de manier waarop de onderzoeksgegevens worden verzameld, gebruikt en behandeld en welke eventuele risico's u zou kunnen lopen door te participeren in dit onderzoek Indien u vragen had, geeft u bij ondertekening aan dat u deze vragen heeft kunnen stellen en dat deze vragen helder en duidelijk zijn beantwoord. U geeft aan dat u vrijwillig akkoord gaat met uw deelname aan dit onderzoek. U ontvangt een kopie van dit ondertekende toestemmingsformulier. Ik ga akkoord met deelname aan een onderzoeksproject geleid door Karel Poels. Het doel van dit document is om de voorwaarden van mijn deelname aan het project vast te leggen. 1. Ik kreeg voldoende informatie over dit onderzoeksproject. Het doel van mijn deelname als een geïnterviewde in dit project is voor mij helder uitgelegd en ik weet wat dit voor mij betekent. 2. Mijn deelname als geïnterviewde in dit project is vrijwillig. Er is geen expliciete of impliciete dwang voor mij om aan dit onderzoek deel te nemen. 3. Mijn deelname houdt in dat ik word geïnterviewd door een onderzoeker van de Erasmus universiteit Rotterdam. Het interview zal ongeveer 60 minuten duren. Ik geef de onderzoeker toestemming om tijdens het interview geluidopnames te maken en schriftelijke notities te nemen. Het is mij duidelijk dat, als ik toch bezwaar heb met een of meer punten zoals hierboven benoemd, ik op elk moment mijn deelname, zonder opgaaf van reden, kan stoppen.

	4. Ik heb het recht om vragen niet te beantwoorden. Als ik me tijdens het interview ongemakkelijk voel, heb ik het recht om mijn deelname aan het interview te stoppen. 5. Ik heb van de onderzoeksleider de uitdrukkelijke garantie gekregen dat de onderzoeksleider er zorg voor draagt dat ik niet ben te identificeren in door het onderzoek naar buiten gebrachte gegevens, rapporten of artikelen. Mijn privacy is gewaarborgd als deelnemer aan dit onderzoek. 6. Ik heb de garantie gekregen dat dit onderzoeksproject is beoordeeld en goedgekeurd door de ethische commissie van de EUR. 7. Ik heb dit formulier gelezen en begrepen. Al mijn vragen zijn naar mijn tevredenheid beantwoord en ik ben vrijwillig akkoord met deelname aan dit onderzoek. 8. Ik heb een kopie ontvangen van dit toestemmingsformulier dat ook ondertekend is door de interviewer.	
Handtekening en datum	**Naam Deelnemer**	**Naam Onderzoeksleider**
	Handtekening	**Handtekening**
	Datum	**Datum**

Appendix D.2: Personal Interviews - Informed Consent Form English

Informed Consent form

Name of research project	Bachelor thesis Karel Poels
Purpose of the research	This research is led by Karel Poels. You are cordially invited to participate in this research. The purpose of this research is to capture pharmacists' perspectives on changes in the post-patent market.
Potential risks and inconveniences	You will participate in an interview in which you will be asked questions about the effects of the post-patent market on pharmacy. An example of a typical question you will be asked, "Do you notice a difference between the patented products and generics regarding drug shortages." You must be at least 18 years old to participate in this survey and be employed in pharmacy. During the interview, using a topic list, possible differences described in literature of patented products and generic s will be discussed. An audio recording will be made of the interview so that the conversation can later be worked out ad-verbum (word for word). This transcript will then be used in further research.
Potential risks and inconveniences	You do not have to answer questions you do not want to answer. Your participation is voluntary and you may stop your participation at any time. - There is some discomfort associated with your participation in this study due to the sensitive nature of the subject matter. You do not have to answer questions you do not want to answer. Your participation is voluntary and you may stop your participation at any time. -Specified examples that you have given but do not want in the transcript may be taken out afterwards and not used in the study.
Compensation	You will not receive any compensation for participating in this study . By participating in this study, you will gain a better understanding of differences between patented products and generics. The broader goal of this study is: To ensure better functioning of pharmacies so that they can have more time for their primary task.

Confidentiality of Data	Your privacy is and will continue to be protected to the maximum extent possible. No confidential information or personal data from or about you will be disclosed in any way that will allow anyone to recognize you. Before our research data is brought out, your data is anonymized: anonymized. Some simple examples of this: - your name is replaced by an anonymous, in itself meaningless combination of numbers. - your age itself will not be processed, but placed in a category. For example: age: between 18-25 years / between 25-35 years etc. - your place of residence is not used, but the province in which you live. At the start of our research, your name is immediately given a pseudonym; your name is pseudonymized or "encrypted". In this way, what you indicate in the conversation can be investigated, but the trained investigators do not know that it is you. The research leader is personally responsible for this pseudonym and key and will not share your data with others. Either anonymous data or pseudonyms will be used in any publication. Audio recordings, forms and other documents made or collected as part of this study will be stored on my laptop and will be deleted at the end of the thesis process. The research data will be made available to persons outside the research group if necessary (e.g. for a check on scientific integrity) and only in an anonymous form; in this case to a supervisor at Erasmus University Rotterdam who has authority to do so.
Voluntary	Participation in this study is completely voluntary. As a participant, you can stop your participation in the study at any time, or refuse to allow your data to be used for the study, without giving any reasons. This means that if you decide prior to the study to opt out of participating in this study, it will not affect you in any way. Also, you can still withdraw the consent you have given to use your data up to 3 working days (reflection period) after the interview. In these cases, your data will be removed from our files and destroyed. If during the study, after the 3 working day reflection period, you decide to discontinue your cooperation, this will also not affect you in any way. However: the data you have provided up to the time you stop participating will be used in the study, including the protection of your privacy as described above. Obviously, no new data will be collected or used. If you decide to stop participating in the study, or if you have any questions or complaints, or wish to express your concerns, or any form of harm or inconvenience because of the study, please contact the study leader: Karel Poels

<table>
<tr><td>Statement of Consent</td><td colspan="2">By signing this document, you indicate that you are at least 18 years old; that you have been properly informed about the study, how the study data will be collected, used and handled, and what risks, if any, you might face by participating in this study
If you had any questions, you indicate at the time of signing that you were able to ask these questions and that these questions were answered clearly and clearly. You indicate that you voluntarily agree to participate in this study. You will receive a copy of this signed consent form.
I agree to participate in a research project led by Karel Poels. The purpose of this document is to set forth the terms of my participation in the project.
1. I received sufficient information about this research project. The purpose of my participation as an interviewee in this project has been clearly explained to me and I know what this means for me.
2. My participation as an interviewee in this project is voluntary. There is no explicit or implicit compulsion for me to participate in this research.
3. My participation involves being interviewed by a researcher from Erasmus University Rotterdam. The interview will last approximately 60 minutes. I give the researcher permission to make audio recordings and take written notes during the interview. It is clear to me that if I do object to one or more points as named above, I can stop my participation at any time, without giving any reason.
4. I have the right not to answer questions. If I feel uncomfortable during the interview, I have the right to stop my participation in the interview.
5. I have received an express assurance from the research leader that the research leader will ensure that I am not identifiable in any data, reports or articles brought out by the study. My privacy is guaranteed as a participant in this study.
6. I have been assured that this research project has been reviewed and approved by the EUR Ethics Committee.
7. I have read and understood this form. All my questions have been answered to my satisfaction and I voluntarily agree to participate in this study.
8. I have received a copy of this consent form also signed by the interviewer.</td></tr>
<tr><td rowspan="3">Signature and date</td><td>Name Participant</td><td>Name Research Leader</td></tr>
<tr><td>Signature</td><td>Signature</td></tr>
<tr><td>Date</td><td>Date</td></tr>
</table>

Appendix E.1: Personal Interviews - Interview Protocol Dutch

Deel 1: Introductie:
Goedemorgen/middag/avond, dank u voor uw tijd vandaag. Ik kijk er naar uit om te leren over het apothekersvak en hoop dat u het leuk vind om uw ervaringen te delen.
Ik zal beginnen met wat over mezelf te vertellen. Ik ben in 2019 begonnen met mijn opleiding economie en bedrijfseconomie in Rotterdam. Ik doe nu een major marketing en kwam zo deels op dit onderwerp. Mijn interesse voor farmacie komt vooral voort uit het feit dat mijn ouders allebei werkzaam erin zijn en dat ik zelf ook in meerdere delen van de farmaceutische keten heb gewerkt. Dit zorgde ervoor dat ik al veel passieve kennis had over het werken van de keten en vond het nuttig en handig om dit te gebruiken voor mijn thesis. De waarde van het belichten van meerdere perspectieven op gecreeerde waarde kwam naar voren in een seminar over Marketing strategie. Om dit te onderzoeken leek het me handig om daarbij mijn farmaceutische kennis te gebruiken. Van de literatuur die ik tot zo ver heb gelezen merk ik dat er veel verschillende aspecten zijn als het gaat om verschillen tussen de gepantenteerde en generieke medicijnen. Ik ben benieuwd naar wat uw ervaringen hiermee zijn.
Deel 2: Interview proces uitleg
Allereerst wil ik uw toestemming vragen om dit gesprek op te nemen om het zo goed te kunnen verwerken.
Dan zou ik ook graag even door het toestemmingformulier gaan.
De interview data zullen alleen worden gebruikt voor mijn bachelor thesis en vervolgens zal ik de data na het thesisproces verwijderen. De thesis zal alleen beschikbaar zijn voor studenten en personeel van de universiteiten. Het interview zal geheel anoniem blijven en in mijn thesis zal ook nergens uw naam worden genoemd. Ik wil u ook attenderen dat als u ergens oncomfortabel bij voelt, dan kunt u het interview direct stoppen zonder een reden.
Als u na het interview toch niet uw data wil delen dan kunt u altijd uw toestemmingsformulier terugvragen. Ik vraag u wel om dit spoedig te doen, zodat ik tijdig nieuwe kandidaten kan vinden.
Het interview zal gestructureerd zijn in een semi-structured format, dit houdt in dat ik een paar voorbereidde gethematiseerde vragen heb, maar dat u daarna vooral ruimte krijgt om een open antwoord te geven en dat ik daarna wat vervolgvragen zou hebben om bepaalde thema's verder te onderzoeken. Soms zal ik misschien wat vervolgvragen stellen waarop u denkt dat het antwoord logisch is of dat het duidelijk is. Deze vragen stel ik dan zodat er geen onduidelijkheid onstaat in het antwoord en dat ik het inderdaad goed heb begrepen. Verder hoeft u ook zeker geen specifieke getallen te noemen. Soms is het natuurlijk handig om een voorbeeld te geven om iets te duiden en dan kunnen getallen daar bij helpen. Achteraf kunt u dan ook zeker aangeven om dat soort gegevens of voorbeelden uit het transcript te laten.
Voor mijn onderzoek wil ik me voornamelijk focussen op de situatie voor en na het verlopen van patenten. Ik weet dat de situatie voor de invoering van het preferentiebeleid heel anders was en ik snap dat het een groot effect heeft op de veranderingen, maar ik denk dat het nuttig is om vooral te focussen op de huidige situatie. Ik vraag u dan ook om alleen de situatie sinds de invoering van het preferentiebeleid in acht te nemen.
(start opname)

Deel 3: Interview

Kan u uw verbale consent nog een keer geven voor de opname?

1. Wat voor veranderingen vinden er volgens u plaats voor de apotheek als een medicijn zijn patent verliest? Wat zijn daarin de belangrijkste aspecten
2. Wat kunt u zeggen over de verschillen in monetaire waardes tussen de post-patenten markt en ervoor?
   Vervolgvragen: Hoe belangrijk zijn die voor uw apotheek? Maken jullie meer winst door de verkoop van patente producten of de generieken? Per product/in het geheel. Medische noodzaak? verlies van winst van import parrelelmedicijnen?
3. Is er een verschil tussen de kortingen of gunstige afspraken die ontstaan tussen de generieken en de patentenproducten?
   Kun je duiden wat de verschillen hierin zijn tussen de generieke bedrijven en bedrijven met gepatenteerde medicijnen.
4. Hoe zit het met de betrouwbaarheid van leveringen tussen de patente producten en generieken? Leveringen van gepatenteerde medicijnen?
5. Zijn er samenwerkingsverbanden met patente producten of generieken producten in het makkelijker naar de klant toe brengen? Hoe belangrijk zijn die voor de apotheek? Prijs voor het verlopen van patent omlaag en de patient wordt al iets bekender met het nieuwe product door het samenwerkingsverband.
6. Medicijnwisselingen gebeuren meer in de post-patenten markt, welke gevolgen heeft dat voor de apotheek?
7. Wat voor verschillen bestaan er in de post-patenten markt in het gebruik van medicijnen?
   Denk aan: Kwaliteit van medicijnen, toedieningsvormen, verpakkingen en patientvriendelijkheid.
8. Is er nog iets dat u zou willen toevoegen dat nog niet besproken is?

Appendix E.2: Personal Interviews - Interview Protocol Engels

Part 1: Introduction:
Good morning/afternoon/evening, thank you for your time today. I look forward to learning about the pharmacy profession and hope you enjoy sharing your experiences.
I will begin by telling you a little about myself. I started studying economics and business economics in Rotterdam in 2019. I am now doing a marketing major and that is partly how I came to this subject. My interest in pharmacy comes mainly from the fact that my parents both work in it and that I myself have worked in several parts of the pharmaceutical chain. This ensured that I already had a lot of passing knowledge about how the chain works and found it useful and convenient to use this for my thesis. The value of highlighting multiple perspectives on value created came up in a seminar on Marketing strategy. To explore this, I thought it would be useful to use my pharmaceutical knowledge in the process. From the literature I have read so far, I find that there are many different aspects when it comes to differences between patented and generic drugs. I am curious to know what your experiences with this are.
Part 2: Interview process explanation
First, I would like to ask your permission to record this interview in order to process it properly.
Then I would also like to go through the consent form.
The interview data will only be used for my undergraduate thesis and then I will delete the data after the thesis process. The thesis will only be available to university students and staff. The interview will remain completely anonymous, nor will your name be mentioned anywhere in my thesis. I would also like to draw your attention to the fact that if you feel uncomfortable with anything, you can stop the interview immediately without a reason.
If you still do not want to share your data after the interview you can always ask for your consent form back. I do ask that you do this soon so that I can find new candidates in a timely manner.
The interview will be structured in a semi-structured format, this means that I will have a few prepared themed questions, but then you will mainly have space to give an open-ended answer and then I would have some follow-up questions to explore certain themes further. Sometimes I might ask some follow-up questions where you think the answer makes sense or is obvious. I then ask these questions so that there is no ambiguity in the answer and that I have indeed understood it correctly. Furthermore, you certainly don't need to give specific numbers either. Sometimes, of course, it is useful to give an example to clarify something and then numbers can help with that. Afterwards you can certainly indicate to leave that kind of data or examples out of the transcript.
For my research I want to focus mainly on the situation before and after the expiration of patents. I know that the situation before the introduction of the preference policy was very different and I understand that it has a great effect on the changes, but I think it is useful to focus mainly on the current situation. So I would ask you to consider only the situation since the introduction of the preference policy.
(start recording)
Part 3: Interview
Can you give your verbal consent one more time for the recording?

1. What changes do you think take place for the pharmacy when a drug loses its patent? What are the most important aspects in this
2. What can you say about the differences in monetary values between the post-patent market and before?

Follow-up questions: How important are these to your pharmacy? Do you make more profit selling patented products or the generics? Per product/in the whole. Medical necessity? loss of profit from import parrelel drugs?

3. Is there a difference between the discounts or favorable agreements that arise between the generics and the patent products? Can you interpret what the differences in this are between the generic companies and companies with patented drugs.
4. What about the reliability of supplies between the patented products and generics? Deliveries of patented drugs?
5. Are there partnerships with patented products or generics products in getting products to the customer more easily? How important are these to the pharmacy? Patent expiration price down and the patient already becomes a little more familiar with the new product because of the partnership.
6. Drug changes are happening more in the post-patent market, how does that affect the pharmacy?
7. What differences exist in the post-patent market in the use of medications?

Consider: Drug quality, dosage forms, packaging and patient friendliness.

8. Is there anything else you would like to add that has not already been discussed?

Appendix F: Personal Interviews - Schedule of Interviews

Name	Date	Time	Duration	Setting
Respondent 1	05/June/2023	13.03-14.02	24 minutes	Consulting room
Respondent 2	07/June/2023	14.06-14.54	19 minutes	Living room
Respondent 3	13/June/2023	15.18-16.02	20 minutes	Online via teams
Respondent 4	14/June/2023	14.01-14.43	20 minutes	Conference room
Respondent 5	14/June/2023	15.01-15.43	26 minutes	Office
Respondent 6	15/June/2023	09.21-10.17	39 minutes	Conference room
Respondent 7	20/June/2023	10.01-10.23	14 minutes	Online via teams
Respondent 8	21/June/2023	14.02-14.31	13 minutes	Office
Respondent 9	23/June/2023	21.33-21.54	14 minutes	Online via teams
Respondent 10	26/June/2023	14.01-14.28	15 minutes	Online via teams

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Appendix G: Personal Interviews - Participants Profile - Background Summary

Name	Region	Type of pharmacy	Categorized Experience
Respondent 1	Zuid Holland	Outpatient pharmacy	27 years
Respondent 2	Limburg	Hospital pharmacy	28 years
Respondent 3	Zuid Holland	Outpatient pharmacy	30 years
Respondent 4	Noord Brabant	Hospital pharmacy	20 years
Respondent 5	Noord Brabant	Outpatient pharmacy	40 years
Respondent 6	Noord Brabant	Public pharmacy	15 years
Respondent 7	Noord Brabant	Public pharmacy	35 years
Respondent 8	Noord Holland	Outpatient pharmacy	26 years
Respondent 9	Noord Holland	Hospital pharmacy	6 years
Respondent 10	Limburg	Hospital pharmacy	22 years

Appendix H: Personal Interviews - Interview Transcripts Example

Participant 1

Interviewer [00:00:02] Well ---. First tell me what special profession you do. Say what, what kind of pharmacist are you?
Participant 1 [00:00:08] I am a hospital pharmacist in ---. so uh I yes uh worked for 25/27 years in ---. So, I was uh trained as a hospital pharmacist. Uhm and had to or uh I was responsible for treating the patients in the hospital. And uhm. about four years ago I made a switch to outpatient pharmacy.
Interviewer [00:00:38] Ok.
Participant 1 [00:00:40] And now uh I am part of the outpatient pharmacy. And the outpatient pharmacy we have divided into four CoJ so result responsible units.
Interviewer [00:00:53] Yes.
Participant 1 [00:00:54] Uh, and I'm mainly concerned with the home administration of a specific medicine.
Interviewer [00:00:59] Ok. Can you give your verbal consent again for the recording?
Participant 1 [00:01:04] Totally good.
Interviewer [00:01:05] Yes, ok, question one: Uh, what kind of changes do you think take place for pharmacy when a drug loses its patent? What are the most important aspects in that? In your opinion?
Participant 1 [00:01:21] The patent expires? Yes, then then on the one hand it will be looked at by a generic manufacturer of. Yes, then what is the market and can I uh uhm is the market big enough to introduce a new generic uh drug?
Participant 1 [00:01:44] Uhm. Yes that a manufacturer if say that consideration uh is positive then it will start developing and working with the raw material manufacturer uh registration departments to eventually and that generic drugs to uh produce and register and if that registration process uh yes is positive then there are two uh drugs on the market so to speak originator and the generic.
Interviewer [00:02:21] Yes.
Participant 1 [00:02:21] Who then uh. Yes, uh fight for the market.
Interviewer [00:02:27] And for the pharmacy because uh change?
Participant 1 [00:02:31] Uhm well then, it's possible that you can switch uh to the generic. Certain patients?
Interviewer [00:02:40] Yes.
Participant 1 [00:02:41] And if? Mmm. Mmm der even more. Uhm generic products of the same drugs enter the market. Then you often see that uh uh health insurers have a preference policy.
Participant 1 [00:02:56] Uh or designate a preferred drug. And then, as a pharmacy, you will have to supply that drug.
Interviewer [00:03:04] Yes.
Participant 1 [00:03:05] So those are the things that uh then?
Interviewer [00:03:08] Yes those are things that happen. Yes, but w then certain aspects change according to you?
Participant 1 [00:03:17] The aspect uh is that you can uh provide multiple products.

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Participant 1 [00:03:25] For the same indication. And that you uh if a generic comes that you can then uh in close consultation with it's the originator it's generic manufacturers uh better discount agreements and those are uh negated if uh Uh if.
Interviewer [00:03:46] If preferred.
Participant 1 [00:03:47] designate a preferred resource. then you have no no uh bargaining power.
Interviewer [00:03:53] Ok. I think so. roughly. The second question is what can you say about the differences in monetary values in the post-patent market and before? So, differences in money for pharma?

Participant 1 [00:04:04] For the pharmacy?
Interviewer [00:04:05] Yes, in front of the pharmacy.
Participant 1 [00:04:07] Uhm. The ability to make uh agreements during a patent period. in terms of drug price?
Interviewer [00:04:19] Yes.
Participant 1 [00:04:20] Is more limited than if a generic uh uh is also available and especially if multiple generics are available.
Interviewer [00:04:30] Yes so you do notice that uh and then how important are those for pharmacy?
Participant 1 [00:04:38] Uhm yes, no part of the operation of the pharmacy uh will then uh be able to exist uh on that.
Interviewer [00:04:51] Yes.
Participant 1 [00:04:51] So uh. So uh, suppose you have a currency and a the The operations of pharmacy is costs on the one hand and income on the other. That cost is obviously people uh staff uh depreciation that kind of thing. The revenue is the rates you agree with uh uh health insurers and any margins?
Interviewer [00:05:15] Yes.
Participant 1 [00:05:15] And those margins. Yes, if there is a generic and what is not preferred designated. Yes, that can get uh hefty and be hefty compared to uh the originator price.
Interviewer [00:05:29] Yes.
Interviewer [00:05:30] And t is that what I have read. Is that then also of those medical necessity uh cases are that they are also for a certain generics? so then there is also not that t. Uh I don't know if that is very common that is very common?
Participant 1 [00:05:46] But yes uhm I think of the relatively simple generic products.
Interviewer [00:05:55] Yes.
Participant 1 [00:05:55] Uhm yes. Well it's relatively easy to switch in between generics. Only if you like uh patients uh have tried a generic and get nauseous from it or uh depressed or whatever.
Participant 1 [00:06:15] Then they are going to consult with the doctor uh see if that originator.
Interviewer [00:06:21] And then they can get rid of the preference right?
Participant 1 [00:06:23] Yes, based on medical necessity.
Interviewer [00:06:25] Yes.
Participant 1 [00:06:25] And another possibility to deviate from t preference policy is if t is not available, so a logistical necessity.

Interviewer [00:06:33] Yes.
Participant 1 [00:06:35] So you have a medical necessity and logistical necessity. And yes, we see that increasingly uh coming to the forefront uh that logistical necessity that just a lot of medicines are no longer available.
Interviewer [00:06:51] Yes, coming up. Uhm. Yeah, we just dealt with that like that. Look, we're just going ahead. Uh, what about the reliability of supplies between patents and generics? So what we just started talking about actually? Uhm.
Participant 1 [00:07:14] Yes, generally they generic manufacturers are also well available?
Interviewer [00:07:21] Yes.
Participant 1 [00:07:22] Uhm, if a reasonable price is paid for it. Mmm. So you can imagine if a uh a generic uh by designating a preference policy uhm is only worth a few cents uh then.
Interviewer [00:07:42] Is t something interesting for the generic to deliver.
Participant 1 [00:07:44] Not very interesting. And then it can be said that it isn't a very big drama if that drug is not there. if there are other generic.
Interviewer [00:07:57] Uh if she does get delivered in another country.
Participant 1 [00:08:00] What you also see is that preference policy has so clearly put pressure on the market that a drug costs and certainly of the generic or there where generics are possible that that uh has had so danig uh impact on the price. That uh that compared to other uh European countries for example. that there the price is higher and then the manufacturer says yes then.
Interviewer [00:08:29] Then we first deliver
Participant 1 [00:08:30] am I going to deliver it first in France or in Germany and then if they have not produced enough, yes then you get supply shortages.
Interviewer [00:08:39] Yes.
Participant 1 [00:08:40] So that preference policy definitely uhm uh had an influence. Well, because that has created a race to the bottom, but by it had to be cheaper and cheaper so also uhm uh these kinds of products are produced mainly in India and China.
Interviewer [00:09:00] Yes.
Participant 1 [00:09:01] Yes and then if something uh goes wrong there. Yeah, then you immediately have a global problem.
Interviewer [00:09:09] Yes.
Participant 1 [00:09:11] So that.
Interviewer [00:09:11] Yes. Uhm. Are there partnerships with patents or generics in making it easier to get to the customer? So that's where we are sort of uh. For example the generic has collaborated with you guys in uhm easier to use the patient for a particular product or the the the the the captopril has something with uh pati are, but not with you guys does something with you guys and then it makes sure that the patient can use it better the product.
Participant 1 [00:09:43] No, because the the generic and the uh originator so they are generally completely interchangeable.
Interviewer [00:09:52] Mmm.
Participant 1 [00:09:53] So then on the one hand it is uh uh yes what can you claim from the health insurance company and what are your costs?
Interviewer [00:10:01] Yes.

Participant 1 [00:10:02] And those are registered drugs, so are probably just as good or the the the there is testing for that. So those captopril from those those different generic manufacturers, those are generally as good as those captopril from the originator.
Interviewer [00:10:20] Yeah, da's don't really have to come to anything from those generics.
Participant 1 [00:10:24] N No, no. Uhm. And what you see is that, for example, his is such a manufacturer of the originator. Which also often has uhm generics uh a business units
Interviewer [00:10:36] Mmm.
Participant 1 [00:10:37] And they then also their product that they are originator of they are going to uh also market generically. Yes for example Sandoz is a generic uh manufacturer but is part of Novartis. Ok. And Novartis is an originator an innovative industry.
Interviewer [00:10:55] Yes, so then.
Participant 1 [00:10:57] Then t is a year compared to uh detergents. You know, Unilever also has uh has Ariel has omo has uh. Uh what's it called? Uh uh uh name another drug or uh a uh was uh detergent.
Interviewer [00:11:15] Yes. Uh uh I don't know man I I use Albert Heijn private label.
Participant 1 [00:11:19] Yes Albert Heijn private label.
Participant 1 [00:11:21] So if you as a manufacturer can uh market multiple uh labels and each label has uh 5% of the market.

Interviewer [00:11:33] Got t too? Come up with a hefty share anyway.
Participant 1 [00:11:35] Didn't you?
Interviewer [00:11:35] Uh. Yes.
Participant 1 [00:11:36] Suppose you have something.
Interviewer [00:11:37] And if you make each product slightly different. Then you just get the different shares in the market
Participant 1 [00:11:42] so Pure uh or pure but uh just market mechanism.
Interviewer [00:11:47] Yes also just o yes absolutely. Yes. ok uhm drug switching is happening more in the post patent market. What impact does that have on pharmacy.
Participant 1 [00:11:58] Changes.
Interviewer [00:11:59] Changes? So uh from generic to another generic?
Participant 1 [00:12:02] Yes uh well that that uhm. is. That's so Uh mainly prompted often by preference policies and prompted by uh the availability as well.
Interviewer [00:12:17] Mmm.
Participant 1 [00:12:17] But uhm suppose that preference policy was not there, then as a pharmacy being uhm you would grab a generic from Accord, for example.
Interviewer [00:12:27] Yes and then yourself would too.
Participant 1 [00:12:29] Like that you would then uh stock up on that. Yes and then you would no longer stock captopril and those other generics but because uh different health insurers designate different uh preferred drugs. Well from captopril you might have four or five different uh generics on the shelf.
Participant 1 [00:12:53] Yes and of course that doesn't make business management optimal.
Interviewer [00:12:56] No.
Participant 1 [00:12:58] So I yes that there is uh influence on Uh the generic market. And yes, then will be varied in. As in a patient goes from silver cross to vgz.

Interviewer [00:13:14] Yes.
Participant 1 [00:13:15] The end of the year and VGZ has uh designated another preferred drug, then you will have to Switch.
Interviewer [00:13:22] Yes then you should stock t too.
Participant 1 [00:13:24] Yes.
Interviewer [00:13:27] Yes that uh is also what I knew about it. Uh what differences exist in the post patent market in the use of drugs? So think about quality of drugs. is there?
Participant 1 [00:13:41] No. Uhm, what I said, t hat are drugs that are uh developed are produced according to GMP standards.
Interviewer [00:13:50] Yes.
Participant 1 [00:13:50] Uh. Registered are. So uh I assume that uh it is the same in the captopril generic and does the same.
Interviewer [00:14:02] And uh yes t same substance.
Participant 1 [00:14:04] Same substance for sure, but also has n v similar uh and side effects.
Interviewer [00:14:10] Mmm.
Participant 1 [00:14:11] Uhm. Yes, and that is also tested.
Participant 1 [00:14:16] it Could be that then that's just a variation with excipients for example. that then uhm maybe you see some other side effects, but that's being investigated. And uhm, that's also presented for judgement to the uh through the registration file to the EMA or FTE.
Interviewer [00:14:36] ok.
Interviewer [00:14:37] And forms of administration?
Participant 1 [00:14:41] Yes administration forms, yes tablets.
Interviewer [00:14:44] I mean, it's mainly t is mainly n how easy you can bring to the customer. So you get a lot of complaints say from the customer.
Participant 1 [00:14:53] Well, uh and preference policy explaining that? That's one thing yes.
Interviewer [00:14:58] And no. We. I think that I'm more the purpose of like.
Participant 1 [00:15:02] from innovator to generic?
Interviewer [00:15:02] Yes, from innovator to generic and then.
Participant 1 [00:15:04] Yes well that. That quite often requires some discussion. because uh patients might be on that originator product for years and then uh comes a generic and then one has to switch. Yes people would rather not do that.
Interviewer [00:15:21] Yes, they don't like that switching no.
Participant 1 [00:15:22] No. And yes with preference policies. Uh Then you often see there's also switching and switching and switching and switching again.
Interviewer [00:15:29] Yes.
Interviewer [00:15:31] But the. So if you have a a couple a new customer. Mm hu - and that one gets a new product, a generic product. And that one's new that one doesn't have that old one yet.
Participant 1 [00:15:41] Yes.
Interviewer [00:15:42] Well, that soon won't be convenient, because they must have had the other one too. Uh say. Where we the forms of administration, the size of the pill or the the say a syringe or something? Yes is then uh easier to use For the customer is that easier for the if if t is a generic product or if the one is an innovator product or is that very specific is then not in the to say.

Participant 1 [00:16:05] No uh you know with tablets or capsules won't make much difference. Uh. What we do see with parenteral drugs is that that, for example, an originator who develops his form of administration from uh through. into uh first or second generation or third generation so that it becomes increasingly easy.
Interviewer [00:16:25] Yes.
Participant 1 [00:16:25] And then when a generic enters the market, you see that it still often has problems with the form of administration.
Interviewer [00:16:35] That that that that that that that that that uses of them out of his own just a a form of administration. And that that doesn't change a whole lot in that or anything.
Participant 1 [00:16:42] Well that one that also developed a form of administration, but then that's just probably a version number.
Interviewer [00:16:51] So don't they take over from the innovators or that too?
Participant 1 [00:16:51] The form of administration often does not.
Interviewer [00:16:53] Not uh ok.
Participant 1 [00:16:54] Disposable syringe is often self-developed by the manufacturer and a substance itself that is uh is uh often from a registration file. But the yes the form of administration the disposable syringe for example that yes that if you just introduce a uh new drug, then you have a version zero of the uh of the form of administration. And that in itself doesn't have to be a problem. Uh suppose uh a drug the innovator uh he then has three versions so that disposable syringe has then gotten better and better. The generic has uh uh one. So that's something fragride or not so well developed yet. But yes, if you uhm have the drug administered by a nurse at home? Yes yes, they can. Those are professionals. Yeah they do uh train on that uh on the version one because yes they have also given the version one of the originator.
Interviewer [00:18:01] Yes, so it's very Medicine specific. Yes yes ok H uh then with the packaging is there too?
Participant 1 [00:18:09] Yes yes. Mmm that shouldn't be a barrier to.
Interviewer [00:18:17] No, not a real one.
Participant 1 [00:18:20] Look, you're in boxes, strips, dings. Uh.
Interviewer [00:18:23] Yes.
Participant 1 [00:18:25] Often those packages are similar to the originator.
Interviewer [00:18:33] Ok ok.
Participant 1 [00:18:33] well often a house line or a uh travel brand like uh design but that is not qualitative uh less than the originator.
Interviewer [00:18:45] No.
Interviewer [00:18:46] And when it comes to in pharmacy. Which would you prefer then? Say those that patent uh packaging or the generic packaging?
Participant 1 [00:18:56] doesn't matter to Me.
Interviewer [00:18:57] T is not say convenient to put away or anything. That uh.
Participant 1 [00:19:00] it's boxes.
Interviewer [00:19:01] Ok uh uh the patient kindness. I don't know what I mean by that. Uh. Mmm. A lot has been talked about that. Is there anything else that uh u z want to add that hasn't been discussed yet.

Participant 1 [00:19:20] Well yes, so that metoo makes it uh have you now.
Interviewer [00:19:23] Uh. Yes yes,
Participant 1 [00:19:26] I think then that gives a better Insight.
Interviewer [00:19:26] yes.
Participant 1 [00:19:27] No but what you could still. Euh. Described is also the parallel imports.
Interviewer [00:19:37] What are they?
Participant 1 [00:19:38] Well yes. For example uh a drug which uh has an originator. So still in patent. Uhm, that's on the market in the Netherlands, but also in Germany, Also in Greece or in Spain.
Interviewer [00:19:56] As innovator product.
Participant 1 [00:19:57] As an innovator product. And uh, d'r are parallel importers who then for the Dutch market uhm The substance or they buy the drug in Spain because it's Cheaper there that then register it in the Netherlands and then sell it here in the Netherlands.
Interviewer [00:20:19] Okay. Because it's cheaper there.
Participant 1 [00:20:22] Yes so then uh uh it's for the uh. Pharmacy or the hospital pharmacy. Again interesting to buy that parallel imported product.
Interviewer [00:20:33] Yes there you get and is that also law? Is that only with innovative product or also generic?
Participant 1 [00:20:38] Uh well, the generics are often so cheap.
Interviewer [00:20:42] That that doesn't really.
Participant 1 [00:20:43] Not really paying off. No.
Interviewer [00:20:44] Yes.
Participant 1 [00:20:45] But the innovator products Yes that uh is yes.
Interviewer [00:20:53] That kind of ensures that he that those prices will go down a bit as well. Yes yes.
Participant 1 [00:20:57] On the other hand uhm uh the prices are also uhm again if things are a bit lucky uh uhm European set.
Interviewer [00:21:08] Yes.
Participant 1 [00:21:08] At least our prize
Interviewer [00:21:11] You can only import from Europe?
Participant 1 [00:21:14] No, you can also from other countries.
Interviewer [00:21:15] Yes.
Participant 1 [00:21:16] But our price is set by the prices, for example in Norway, uh Belgium and another country. Well that becomes the average and that becomes the price in the Netherlands. D'r is also a price uh uh systamitic price fixing in the Netherlands. And with that one tries to prevent uh that then uh parallels uhm uh mechanisms go uh play. But uh you used to have the pill, for example, was produced by Organon?
Interviewer [00:21:52] Yes.
Participant 1 [00:21:53] But for London for example. Well that first went to England and uh uh was uh so was produced in Oss then went by uh boat to or plane to England and there uh uh parallel importers bought it uh from the wholesaler or from the manufacturer. Then came back to Holland. And then it was uh even cheaper. The price uh proposition in such a country.
Interviewer [00:22:23] Yeah great.

Participant 1 [00:22:25] Yes yes. And uh uh of those very an expensive oncolitics for example. Yes. Such a Such an innovator also has a strategy department, of course. And lots of lawyers on staff. So those uh they are defining and strategising. Or what should be the price of that drug in the Netherlands or in the yes uh in Germany or in France and then that varies. And for example an in uh drug in melanoma. was really an innovative product?
Interviewer [00:23:02] Yes.
Participant 1 [00:23:03] Yes, they did charge the top price for that, but that was determined by the manufacturer who said of ok, where do I want the market to be?
Participant 1 [00:23:13] Well and I certainly want that in the United States, in Germany and United Kingdom.
Interviewer [00:23:20] Yes, and there you can.
Participant 1 [00:23:22] And then you base the price on that. And every ampoule then sold in Belgium, they basically don't care.
Interviewer [00:23:30] So just extra. Then that's nice.
Participant 1 [00:23:32] But the price is then determined how important it becomes.
Interviewer [00:23:34] Yes. And those are pretty high paying markets. ok. I think we got it --- Thanks for the interview.

Participant 2

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Interviewer[00:00:00] Hi ---, uh uh can you uh uw give your verbal consent for the recording?
Participant 2[00:00:08] Yes, I agree.
Interviewer[00:00:10] Ok. Uh, well, introduce yourself first.
Participant 2 [00:00:15] Well uhm. I'm ---. I am a hospital pharmacist. Uhm hospital pharmacist in --- at the UMC. That is an academic center. Uhm, that's where I'm acting head. Uhm. One of the pharmacy and our hospital pharmacy and outpatient pharmacy is completely integrated. Well, department so there is no difference.
Interviewer [00:00:43] And how many years of experience?
Participant 2 [00:00:44] I've been working in this pharmacy for almost 25 years and before that, uh, in changing pharmacies, I've always been working in hospital pharmacies for another three years.
Interviewer [00:00:54] OK, thank you. Uh. Starting with the first question. What kind of changes do you think will take place for the pharmacy if drugs lose their patent? So try to name the most important aspects.
Participant 2 [00:01:06] Uhm, then you often see that generic manufacturers are coming up. Uhm and then uh ge. Go. Of course, the preferential policy comes in handy. Ha, then you get that the health insurers make different choices. Uhm, but you have a hospital perspective Hey, so from uh, you see that doctors don't just act and seeing this is often a thing of the past. Yes. So you have to go there like a hospital pharmacist, uh. In mediating to see oh they can't switch to a generic preparation, so you and about that. Yes, you can convince you more with the effectiveness and quality of the new generic. Yes, and now? To ensure that you can conclude a generic contract, which simply costs you, uh, less as a hospital. And then, as a pharmacist, you have to go in yourself. This is not going to be the previous one. Well, from the health insurers, that one actually.
Interviewer [00:02:04] No. Would you say they are responsible for that?

Participant 2 [00:02:07] You don't have a preferential policy in the hospital, so it's the hospital. People who are admitted there is a different cost structure. So that's where you make as a hospital pharmacist. Uhm, we do that academically and nationally. Hey. That we have a fairly large purchasing combination. And then we're going to negotiate prices with uh with the manufacturer. Mmm. With generics and with the brands. The brands.
Interviewer [00:02:31] Yes, so you actually have no preference at all.
Participant 2 [00:02:33] There is no preference in the hospital. Which uh in, uh, outpatient pharmacies there do you have. So that can be a completely different one. Uh that's a whole different uh dynamic. And what you see is that often, uh. Generic companies try to get to the hospital, because then specialists will prescribe the generic drugs and the GPs will take over. Often. So yes. It is often a structure via the hospital to ensure that they are on hand and the one.
Interviewer [00:03:02] But why? So why do you want certain generic drugs to be used by those doctors?
Participant 2 [00:03:08] Yes, but lower costs are because you get treatment earlier. Hey, suppose you need a new knee. Then you get, say, uh, from uh, from the hospital's health insurer €5,000. Yes, but then you have to pay for everything.
Interviewer [00:03:22] But that's what you do. Is that cheaper from the patient's point of view or really over from the pharmacy.
Participant 2 [00:03:27] That's why they're from the pharmacy. So we then try to keep the costs as low as possible so that the hospital has as much of that €5,000 as possible. Yes, because that's just a fixed amount. Just get a fixed amount, €5,000 for example. Well, the less you incur, the more you have left over and the more you can put that into uh treatments where the price isn't so good. Or that improves your quality or improves a patient experience. So, as a pharmacy, you try to conclude contracts as cheaply or as well as possible, but there are also other elements where you conclude a contract, for example. Uh, in our hospital, we think it's very important that uh medicines have a barcode. Yes, so that may be an item where we are.
Interviewer [00:04:14] Yes, that's especially when you're...
Participant 2 [00:04:16] price on return.
Interviewer [00:04:17] Yeah, that's especially when you're the crazy thing you need to get in. This is very easy for such a system, isn't it? Right?
Participant 2 [00:04:21] Yes, come on uh h so you can be sure that the nurse has the right medicine and the good patient again. And then you just scan that. Just like with the Albert Heijn, you can be sure that's it. Do you make fewer mistakes. But then we are willing to sacrifice a price.
Interviewer [00:04:36] Ok. Well uh, interesting stuff. Ok. Uhm. Well, I think you've talked about it for a while. What can you say about the differences in the monetary value between the post-patent market and before? So uh, mostly amounts of money?
Participant 2 [00:04:52] How much does that make a difference?
Interviewer [00:04:54] Yes.
Participant 2 [00:04:54] Is that what you mean? Between brands and a generic?
Interviewer [00:04:57] Yes.
Participant 2 [00:04:58] Yes, that's gigantic.
Interviewer [00:05:01] Ok.

Participant 2 [00:05:01] Yes. No. Yes. That, of course, varies by medicine? but that. Yes, if you do that at the right time, you can really make a lot of profit on it for a year, two years, and then those prices will draw the same, huh? So at first, that's mostly Hey, then, uh, then sagging. Then those generics already want to come on the market. So you're going to have extra bags with such a price. That one, uh, is almost okay. Yes, that comes at a very low price. And that brand is still at a high price. Because yes, many people don't want to leave yet. But if you know how to switch right from the start, you can actually raise a considerable amount of money.
Interviewer [00:05:43] Ok, yes, uh, and then uh, there are also a lot of uh discounts that are also agreed between you and the generic one. Just say that to promote that new product, for example.
Participant 2 [00:05:58] Yes, you do get a discount on that. Just yes. Uhm yes. We usually then buy nationwide with that large purchasing combination so that we have a whole one there. The larger your volume is what you buy. More than a manufacturer wants to go down. So if you agree on a contract with a manufacturer with all academic hospitals, you will also receive a substantial discount.
Interviewer [00:06:20] Yes, that's logical, yes.
Participant 2 [00:06:21] Yes. Hey So we try that as much as possible. But then you can see that the Amsterdam region, for example, prefers that manufacturer. hey So that can sometimes differ. Or that depends on the group of doctors who sit there.
Interviewer [00:06:33] Yes, that is sometimes difficult to agree on.
Participant 2 [00:06:35] Yes, well. And then? Uhm. Yes. Docters can also have interests, say going for a certain manufacturer. Yes, because they get paid through another structure, such as nurses. Or research.
Interviewer [00:06:54] And do you also have an existing patent with that uhm, for example? Can you also sort of arrange a discount with that?
Participant 2 [00:07:00] If so, for hospital patients. Ok, so that's the same thing. Hey So to get market share. Suppose you have uhm. Uh, something for high blood pressure? And there are already two resources and a third is being added. Well, then the third party may say yes, I'll just go. I am now offering it at a cost so that you get more market share.
Interviewer [00:07:22] But that's not necessarily the same uh medicine. But that's what those things are with Too.
Participant 2 [00:07:28] Yes, they are in the same group.
Interviewer [00:07:29] Yes, same group. And that's the same thing.
Participant 2 [00:07:31] Yes, yes, you have pindolol, metroprolol, bisoprolol. That is, they are all in the same group. And so it may be that, uh, when she comes back on the market next, she thinks yes, but I want 30% of the market share so it will fall with the price. And if these are mainly medicines that are used chronically by patients, for example diabetes or something. Yes, they may say well, in the hospital I'll do a 90% discount, 90% and then, uh, yes, they'll work, we'll buy that heaven, you'd think. Well, that's a good deal. But ultimately, they always end up getting market share and they don't do that at the public pharmacies. So the health insurer has actually lost uhm more. So that's why they preferred to work with generic drugs. Because yes.
Interviewer [00:08:18] Otherwise, yes, you won't get there.
Participant 2 [00:08:21] Yes.

Interviewer [00:08:22] Ok, that's interesting. Uhm. What about the reliability of the deliveries and between the patents and the generic ones?
Participant 2 [00:08:30] Yes, that depends and that depends on a lot of things. the reliability of deliveries, because yes, uh, you have a very long chain and things can go wrong anywhere. So, uh... And because we have increasingly focused on healthcare costs and the price in the Netherlands has reduced it a lot. Hey. As a government of medicines, uh, aren't many manufacturers so keen on the Dutch market anymore? so you see that there is only one manufacturer left of some drugs. And if something happens there, you're very vulnerable and you're done with nothing. So availability of but true. What you also see is that, thanks to a preferential policy such as that at the outpatient pharmacy, maybe more. Uhm, that everyone buys from the same manufacturer.
Interviewer [00:09:19] And then yes, preferential policy.
Participant 2 [00:09:21] Yes, yes, and. Then it's over. Then it is. How if everyone spreads that out. Hey if insurance would spread that out. say three manufacturers then so would you.
Interviewer [00:09:30] You mean that if they were to appoint three as preferences.
Participant 2 [00:09:33] Then you would also have three manufacturers to spread the risk. but well, if everyone is the same and something happens there, yes.
Interviewer [00:09:40] Then, uh, yes, and then suddenly you have to switch to another uh remedy. Yes, and that needs to come out, so yes, we should get that production started. That. Yes, abroad, yes, none of that works. No, and then that's possible.
Participant 2 [00:09:54] You also have to coordinate that with insurance. Hey, yes, that drug is no longer available.
Interviewer [00:09:57] But isn't that what you have with patent products?
Participant 2 [00:10:00] Mmm, less, less. Because.
Interviewer [00:10:04] And that's also a manufacturer, would you say?
Participant 2 [00:10:07] Yes, but there, they earn so much that they can build in more of a safety margin and take larger inventory. Hey uh uh yes, those than those amounts are not, uh, that's far beyond cost coverage.
Interviewer [00:10:19] They don't want to run the risk of suddenly not being able to deliver or anything.
Participant 2 [00:10:22] So no, they will invest more in that. Then look at the generic manufacturer, who makes a box for uh two 2.50 and earns €0.25. Yes, a brand name, yes, it also makes for 2.50 boxes. But it then earns an additional €100. In fact, they're still so far apart saying: yes, that's all for development. Yes, partly yes, but also for a very large part not.
Interviewer [00:10:45] No, but that's mainly for the development they've already put into it.
Participant 2 [00:10:48] Yes, but that's not those costs. That's what she said? No, no, that really goes too far, far above. But that is the story. Because yes, that's definitely the story. Yes, ok. Uhm, this fi? Maybe I'm a little crazy, but are partnerships with patents, products or generic products easy to achieve first? So suppose you have a certain uh partnership with Mylan to make, uh, one of their products easier to bring to the patient, so as to make it easier for the patients to get in.
Interviewer [00:11:19] How do you mean that easier in a yes uh transport or uh delivery.
Participant 2 [00:11:24] deliver to the patient.
Interviewer [00:11:25] Oh so. Yes. Uhm, so that it will be more user-friendly for the patient.

Participant 2 [00:11:32] Sometimes. There are medicines. But yes, that is not our policy. so yes, you can choose that. Hey, you have businesses. A manufacturer has a product and that product must be sprayed. At home, for example, subcutaneously or intravenously or so. Hey. So you need a nurse to do that. So then you have the medicine and the care that surrounds it, that nursing care. Well, then you have manufacturers. They then meet with a company. Well, if a patient wants that medicine, they have to sign up with that company and that company ensures that medicine is given to that patient's home.
Interviewer [00:12:15] Ok, but then uh. I assume that these are mainly patented products, which, of course, are a new product.
Participant 2 [00:12:22] And then yes, that's mainly because of that.
Interviewer [00:12:25] But at some point, the patent goes dead. Well then you have that product. But then uh. Let's say you have a new patient. Are there still partnerships with generic companies to make it easier or isn't there?
Participant 2 [00:12:44] Well, uh, it's not the company itself or the company itself. So uh it's that an intermediate company is often among them that does that for that generic company or brand company. So that company that between companies certainly want to make agreements with that generic manufacturer. That company, a lot of things stick around there too. Hey So finally. Ultimately, of course, it is more expensive than if you were to buy it directly from the manufacturer and arrange it yourself, because that company must also earn something. Yeah, sure, Hey, that's just such a little spacer. So our aim is to let those companies, uh, get us to do that ourselves. But then there are also pharmacies that say no, we outsource that because we don't have staff or we don't have time for them. we do that.
Interviewer [00:13:29] Yes, it really depends on the situation of the pharmacy.
Participant 2 [00:13:33] Yes, that depends a lot on how the pharmacy arranges it.
Interviewer [00:13:34] Yes.
Participant 2 [00:13:35] And what kind of vision they have, do they think it is.
Interviewer [00:13:38] But it's going to be, uh, so to speak. What I was thinking about is that it's like an extra service to sort of promotional material that they were then about to make a deal with the Pharmacies.
Participant 2 [00:13:50] No, that's not happening.
Interviewer [00:13:51] No, ok.
Participant 2 [00:13:52] Because, uh, it's often not about a cure. Most people use more medicines, so that would also be quite complicated for that one medicine. That can be done differently.
Interviewer [00:14:02] Yes. Uhm, drug changes happen more in the post-patent market, which, of course, are more generic brands. Uh what effect does that have for the pharmacy?
Participant 2 [00:14:15] Changes?
Interviewer [00:14:16] Yes, those changes? Yes.
Participant 2 [00:14:19] Uh, not in principle, unless you have the price because every change takes work and time.
Interviewer [00:14:24] Yes, but uh, they happen more because some insurers then go from one generic to another.
Participant 2 [00:14:32] So not nice for a pharmacy.
Interviewer [00:14:33] No.

Participant 2 [00:14:34] Because then, uh, you have to buy others. You have to explain all that to patients. You have administration over that. Prices must be adjusted. So yes, for a pharmacy, it's never nice to change a lot, because you see, you have to change that entire administration and your entire inventory management system every time. So, unless there is something with a price that makes it worthwhile.
Interviewer [00:14:59] Mmm. Yes, that is also possible. Uh.
Participant 2 [00:15:01] Yes, look, imagine that it costs so much that, uh, pharmacies that you can afford half a fee. And you can get a new half pass, half a pharmacy like an assistant.
Interviewer [00:15:12] Yes.
Participant 2 [00:15:13] Bring it in, but I think that would be nice.
Interviewer [00:15:15] Well, I think the whole Fte is crazy when we say we're already going for a generic product.
Participant 2 [00:15:19] No, that's true too. But uh yes there are.
Interviewer [00:15:21] Maybe it's really a lot, uh.
Participant 2 [00:15:23] For an owner, maybe. Uh yes, really as good for such a company as an uh regular pharmacy would be.
Interviewer [00:15:29] Yes.
Participant 2 [00:15:30] But for us, it would be good for the hospital because with that money, huh? Whatever that is, all the money is valuable to be able to use back to the patients.
Interviewer [00:15:41] Yes. Ok. Uhm. What are the differences in the use of medicines in the post-patent market? Then, for example, we can. Uh is The quality of drugs is quite different then.
Participant 2 [00:15:54] Well, there are guidelines for. So, you have to be admitted to the European market anyway. Yeah, so you already have certain quality standards that a medicine must meet. GMP has to be created. It must contain at least 95% of the active substances. So, I guess it is. I think that in itself the rules are tight enough to say that's just as good.
Interviewer [00:16:23] ok, in dosage forms. Is there a difference in that. So yes, syringes or tablets.
Participant 2 [00:16:29] Yes, you sometimes see when a brand of drugs have, for example, uh, insulin pens or things like that that the brands just have nicer products. That's nice.
Interviewer [00:16:38] So do you mean the generic one? Or no, the brands, the, the, the real one, the patent, the patented one. Ok, actually.
Participant 2 [00:16:44] Better though, they're better material. Uh breaks down less quickly. All that stuff, they just put more money into that. than a generic manufacturer.
Interviewer [00:16:54] Uh yes, the packaging.
Participant 2 [00:16:58] No, that doesn't really matter.
Interviewer [00:16:59] It really doesn't matter isn't uh ok. Uh, and patient friendliness means bringing it to the customer.
Participant 2 [00:17:07] Well, you see, uh, brand manufacturers often have leaflets like that. So to inform patients. We don't actually use them. Anyway, you do have one, so you see that the manufacturer does more marketing. Nice leaflet. Yes, and we don't do that as a generic manufacturer.
Interviewer [00:17:26] Ok. Uh, there's another thing you'd like to add that hasn't been discussed yet in the differences between patented products and the generic ones.

Participant 2 [00:17:39] Let's think about what hasn't been discussed yet. Well, so me. Look, I guess that in itself, uh... Yes, we've actually discussed that, maybe. Hey, that's because of government policy. Yes, that, uh... Uh manufacturers do get printed on the price and. Uhm yes, that's what you do. The Dutch market is simply no longer there. It is no longer popular and that this is a problem, even when medicines are available. Well, if something is no longer available and that's because we, as the Netherlands, are too economical, it's a shame. Yes, and especially if medicines are what? Yes, what people really need.
Interviewer [00:18:24] Yes, what I understand about my mother is that the price is that she costs the pharmacy even more to try to arrange that medicine abroad? Yes, yes, that's not good either.
Participant 2 [00:18:35] No, that's that. Yes, that's just that, that. Surely something should be done about that?
Interviewer [00:18:40] Yes. Well, thanks so much for the interview.

Participant 3

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Interviewer [00:00:04] Can you give your verbal consent again before recording?
Participant 3[00:00:09] Sorry, can?
Interviewer [00:00:11] Give your verbal consent again before recording?
Participant 3 [00:00:13] Yes.
Interviewer [00:00:14] Thank you
Participant 3 [00:00:15] Uh yeah, about Wait a minute. Do I want that? Yes, it's good. And who are you going to share it all with then?
Interviewer [00:00:21] This shot with the sub with the supervisor. It's going to listen to it once and then it's done. Yes, it won't be anywhere it will.
Participant 3 [00:00:29] Not that I'm going to end up in those dorm rooms.
Interviewer [00:00:31] No, no, and I will do it too. Oh yes, so will I. After that, I will delete it all.
Participant 3 [00:00:37] Then it must be removed.
Interviewer [00:00:38] Yes, yes. Yes. Yes. Yes. Uh, well, first, introduce yourself.
Participant 3 [00:00:44] I am. Uh yes, you already know me, of course. I'm ---. I uh uh I know your mom and uh I'm a pharmacist.
Interviewer [00:00:54] What for? What kind of pharmacist?
Participant 3 [00:00:57] Actually, I have uh just like your mom. Uh, set up an outpatient pharmacy about thirty years ago. But then in ---, not in --- in --- and, uh, in the LUMC. And uh, it's okay, we've been in a working group together regularly over the years, or uh well, I think we both love, uh, setting up some companies to take a good look at the financial side of that, uh... Uh yes, and of course we also sell pills. Yes, that's what it's about, of course, that's what it's about.
Interviewer [00:01:39] What did you do for? Uh, the outpatient pharmacy public? Yes yes yes.
Participant 3 [00:01:45] I have a very short time to do this in a public and a health center.
Interviewer [00:01:51] Ok.
Participant 3 [00:01:51] And a public pharmacy. Yes.
Interviewer [00:01:53] Ok.
Participant 3 [00:01:54] Yes.

Interviewer [00:01:55] Uhm. Well uh then let's begin. What kind of changes do you think will happen to the pharmacy if a medicine loses its patent?
Participant 3 [00:02:05] Uh Well yes indeed. Uh Right away, of course. Then the price goes down.
Interviewer [00:02:11] Yes yes yes yes yes. And are there other aspects that change this for the pharmacy?
Participant 3 [00:02:17] Uhm and yes, of course, you have that, uh, if the patent goes away, other manufacturers may also, uh uh. I'm not supposed to answer all of this or.
Interviewer [00:02:31] Yes, just maybe maybe just highlight the important aspects.
Participant 3 [00:02:35] Yes. Yes, yes, exactly. So uh uh uh uh uh the patent is off so then uh then that manufacturer no longer has the exclusive right to uh uh uh... can other parties also make it uh, those are the two things huh. So you no longer have the protected right to it. That's what I know about that.
Interviewer [00:02:56] Yes. Uh, well, then we're going to start talking about money right away, as an economics student, that's of course important. What can you say about the differences that arise between, say, if the product loses its patent?
Participant 3 [00:03:10] Yes, I think that's what I just said that's actually the cause of the price drop. Because if you have something the rest shouldn't have, huh? If you can sell something like you. It's now 30 degrees outside and you're the only one selling ice cream. Yes, then you can charge a lot of money for that or even more to your left and right. Uh uh ice cream, uh, sellers are yes, then the price, uh, goes down quickly.
Interviewer [00:03:41] Yes. Anyway, then, of course, you also have uhm metoo products, not only ice creams to keep you cool, but also other remedies.
Participant 3 [00:03:50] Ah yes, ah yes yes. Uh uh what? What happens to that then?
Interviewer [00:03:56] Yes, those too.
Participant 3 [00:03:57] Ah yes.
Interviewer [00:03:58] at that price that goes down.
Participant 3 [00:04:00] Yes, yes. Yes, I've never really thought about that. In other words, yes, sure. Well, if it looks like it. Yes, certainly. Yes.
Interviewer [00:04:11] Ok. Yes.
Participant 3 [00:04:12] Uhm. You mean you mean? Or that's three blood fillers? Uh are three blood pressure lowering drugs or one? that certainly has an effect on, uh, the price of that one. Whether it works counterclockwise or clockwise. Is that what you mean?
Interviewer [00:04:27] Yes, I mean that a little bit, yes. Yes, yes, yes, type of W Yes, that means more than that if they switch. Yes, that price rises will fall much more than if you also have metoo.
Participant 3 [00:04:38] Absolutely. definitely yes metoo?
Interviewer [00:04:40] If so.
Participant 3 [00:04:41] So we now also have metoo in the drug world.
Interviewer [00:04:45] So yes, please sort of like yes.
Participant 3 [00:04:48] Mom, now.
Interviewer [00:04:49] Uhm, and how important, for example, are those that are different than for the pharmacy, so they arise.

Participant 3 [00:04:58] Uh well uh we. Right now, we can use whatever margin we have. Uh, are we seeing the margin decline significantly? Sure. Of course, we have, uh, that we are completely, uh, dependent on China and India and, uh, so raw materials should be sufficient for, uh, the whole world. uh yes, are those differences, uh, important, yes.
Interviewer [00:05:28] So you still have, say, because uh, the generic products that are rising, of course, more and more huh. The one that is no longer sold. The one that percentage is getting higher and higher. So uh yeah. So you're actually saying that margin that we set d'rop. It's just really important because.
Participant 3 [00:05:46] Sure.
Interviewer [00:05:46] Actually, it keeps your pharmacy running.
Participant 3 [00:05:48] Yes yes yes yes well absolutely. Well, from clinic pharmacies, absolutely.
Interviewer [00:05:53] Ok uh.
Participant 3 [00:05:54] And especially for the Academic Uh outpatient pharmacy where there really is still a lot of purchasing margin, uh and uh, and we're giving it away largely to the health insurers to help fund uh care. So we see. But we also see that this is declining, prices are falling, so the margin is also falling. And yes. And I also think, uh, that was a thing, I think that's also a factor. But I don't know if you see it that way either. You can also see that we are a very small country, so we also have a small volume.
Interviewer [00:06:29] Yes.
Participant 3 [00:06:30] So again, we're not that interesting for uh.
Interviewer [00:06:33] No, no. And our prices are also quite low.
Participant 3 [00:06:38] And we also don't have that many mouths.
Interviewer [00:06:41] No. And uhm, is there also a difference between discounts or agreements, favourable agreements that you make between the generic companies or with patents? Uh with a branded brand? Yes, with those branded companies.
Participant 3 [00:06:58] Whether there are differences between them. Yes, back in the day, you really had an uh uh, preferential farmer who you had an appointment with everything.
Interviewer [00:07:09] Had, but that's for the preference policy.
Participant 3 [00:07:11] That was there before that. It was also the end of the preferential policy, but that was of course very nice. Then you just had an uh label and you could just get a good purchase discount on it.
Interviewer [00:07:22] Yes.
Participant 3 [00:07:22] Uh yes, and now? We don't really have it anymore, of course we just have a preferential policy and we already have a preferential policy on transfer. Uh, it's also clear that we're just uh. Mmm, all directions are being moved. Uh what us? Well, whatever your mother does, of course. I'm also helping with that is brilliant. hey See if what can go and get it or when it's real.
Interviewer [00:07:53] Oh yes, I've heard of that, yes.
Participant 3 [00:07:54] Then you should ask her. Uh, I've just negotiated something about that. So let's try anyway. Uh, yeah, uh, even closer to bringing it to market, uh, yeah, uh, getting into a conversation with those pharmacists.
Interviewer [00:08:12] Yes, ok.

Participant 3 [00:08:13] Uh yes. Anyway, it's here. It will certainly also need to be looked at by the government. Then we are at the end of five pharmacists, uh, or one out of three pharmacists can leave.
Interviewer [00:08:27] Yes.
Participant 3 [00:08:28] Or assistants and assistants. Because that is perhaps an even bigger problem.
Interviewer [00:08:34] OK. Um, now let's go to the non-monetary, to non-monetary matters? Uhm. What about the?
Participant 3 [00:08:41] Yes yes Oh yes yes yes.
Interviewer [00:08:44] What about the reliability of deliveries between patents, products and generics?

Participant 3 [00:08:53] Eh yeah eh. At the moment, I would say yes, difficult, I'm not really sure. Back in the day, you would say.
Interviewer [00:09:03] Yes, you know, oh no, we always have real shortages and generics and then it's all relative because, of course, you have a lot more generic products.
Participant 3 [00:09:14] there is really a and a dire shortage in the development of generic products. Uh uh yes, look, just read the newspaper, uh, anti-epileptic drugs, uh, blood pressure lowering drugs, diphenepine, the other day, eye drops. I guess that's uh look at those uh brands, do you have that then you sometimes have that uh uh, what's it called again? Don't talk about the fact that the wholesalers are actually shipped abroad.
Interviewer [00:09:51] Uh yes, uh, the word for it is true. But I haven't seen it yet.
Participant 3 [00:09:56] OK.
Interviewer [00:09:56] I also know what you mean.
Participant 3 [00:09:57] that's where you keep as if you had every time at the end of the month, towards the end of the month, you didn't get that nice new box you wanted to deliver. Because then the wholesaler itself also had an uh uh sales line abroad.
Interviewer [00:10:13] Ah. Yes, and then what? Then shortages occur again. Yes, yes. Uhm. Look, let's just keep going. Uh. Are there partnerships with, uh, patents, products or generic products in easier delivery to the customer?
Participant 3 [00:10:34] again haha?
Interviewer [00:10:37] This one is also difficult though. Uh. Are there partnerships with patents, products or generic products? So there's more with patent products and generic products in an easier way to get those drugs to the customer.
Participant 3 [00:10:50] In making it easier to bring.
Interviewer [00:10:52] So the easy thing to say. You have, you have a certain medicine and a customer, uh, is a new one is new. And then, for example, you have a partnership with yes, Mylan than as a generic one, to make it easier for the customer to understand how it works.
Participant 3 [00:11:09] Yes, they are, there have been. Yes, there are, yes, but.
Interviewer [00:11:13] Were those then? With more generics or patents?
Participant 3 [00:11:23] Actually, I'm afraid to say that.
Interviewer [00:11:24] or it's so little that you think yes, it's not that it's really a whole lot.

Participant 3 [00:11:29] But I think, for example, those insulin pens and stuff, they probably won't. Uh, I'm sure they'll buy it somewhere. Mmm. Uh, but I think you really mean with an uh and, for example, uh, certain inhaler huh.
Interviewer [00:11:43] Yes, yes.
Participant 3 [00:11:44] Yeah, yeah, I'm not in the inhalers like that, though.
Interviewer [00:11:48] well.
Participant 3 [00:11:49] I don't know
Interviewer [00:11:50] Uh, ok.
Participant 3 [00:11:53] Oh you're not going to tell either, huh.
Interviewer [00:11:55] No no no no no these are really your perspectives. I'm not allowed to go well. Uh. Yes, yes, yes, I have to be completely out of it, really. Do I have to stand completely outside it?
Participant 3 [00:12:23] Calm back and let's go, uh, medicine, uh, changes. They happen more in the post-patent market because you have More generics. And uh what consequences does that have for the pharmacy?
Interviewer [00:12:39] Ok, do you want to go again uh?
Participant 3 [00:12:41] So you have uh with insurers who often switch between uh.
Interviewer [00:12:46] Yes, those were these, huh.
Participant 3 [00:12:48] Which ones they prefer and, uh, what effect does the property have for the pharmacy?
Interviewer [00:12:55] I don't understand the beginning sorry.
Participant 3 [00:12:57] So every time, those drug changes as one of the changes.
Interviewer [00:13:01] Oh changes, yes.
Participant 3 [00:13:03] So when an insurer says oh we're going from this generic, we're going to another generic. That is now preferred.
Interviewer [00:13:09] Ok okay, sorry yes, what the consequences are.
Participant 3 [00:13:13] Yes.
Interviewer [00:13:17] Yes, uh, and medication errors, uncertainty, uh, therapy, infidelity, uh, yes, wrong medicines, uh, order? Yes, I think that kind of thing.
Participant 3 [00:13:33] That's tough, yes.
Interviewer [00:13:34] Isn't that it.
Participant 3 [00:13:38] Well, I think it's intense. Yes, yes.
Interviewer [00:13:40] Well uh. Yes, but I also think. Even if they do get really good pills, that's what happens. Then things still go wrong though. Mmm, for example, if I said that one tablet, uh, pill twice.
Participant 3 [00:13:59] And that one time instead of the other way around. So hey.
Interviewer [00:14:03] yes.
Participant 3 [00:14:04] Of course, your mistakes can still occur if they abolish that preferential policy.
Interviewer [00:14:09] Abolish. Yes. But is that what you also do, just like us, is mainly for the bee where the patient is. Yes, you also have a bit of a thing for the operationality of the pharmacy. Does it also have consequences for that.
Participant 3 [00:14:20] Sure. Yes. Oh yes, well, but for operationality in general, but financially, of course, are we much less good at purchasing much less efficiently?

Interviewer [00:14:34] Yes.
Participant 3 [00:14:34] Uh, but you also have uh you're also less able to keep stock. So it's like you, like me, need to have three different preferences and labels in stock. Yes, I can't deliver three boxes of everything, uh, there.
Interviewer [00:14:49] No.
Participant 3 [00:14:50] That's like, uh, shelf life. Yes. Well, well, there are countless reasons why we shouldn't want this, of course.
Interviewer [00:15:01] That is. I don't think anyone wants to hear this. No. No. Uhm. What are the differences in the use of medicines in the post-patent market? Consider, for example, uh, the quality of the drugs. This is primarily for the patient.
Participant 3 [00:15:15] Uh what can happen if, for example, they switch too. And that uh.
Interviewer [00:15:20] Well, for example, you first have a patent, uh product, and you switched to generic, there's a difference between the quality of the two.
Participant 3 [00:15:29] Uhm well, we ourselves always say that we're not investigating that, uh, there. Yes, that the quality is always good, otherwise we will not deliver anything. Uhm and uh me. We don't think, uh, it should be the very best when it comes to a diva or whatever, for example. The effect must be good.
Interviewer [00:15:54] Yes.
Participant 3 [00:15:55] So what we usually do is if we go from an uh like that, for example, to a transfer round if we then, uh, switch to a new product. so the products from, let's say, oncolytics. We're moving to another manufacturer.
Interviewer [00:16:12] Yes.
Participant 3 [00:16:13] Hey, from what a baker thinks, I can do an entire group at once.
Interviewer [00:16:18] So is that from patented to generic or from generic to other generic?
Participant 3 [00:16:20] Eh, this is from, uh, first from patent to generic and then from generic to generic.
Interviewer [00:16:27] Okay
Participant 3 [00:16:28] That's a really nice example from you, by the way. Uhm. But good and. Yes, and when someone says I hate it or I like it this or that, we first say well uh yes, you should try it first or yes uh uh what, uh, yes, it's also when anti-cancer drugs cost a lot of money. Have you already tried recording something? So we'll try there too.
Interviewer [00:16:59] otherwise, otherwise they will move away from the preferential remedy and then they will have to pay themselves, I believe, and that's why.
Participant 3 [00:17:08] Well then we wouldn't let them pay. But we'll let them try first, because when we see that 80% of the patients just take it effortlessly. Then it may be that 20% can also be taken with a little effort. Because that's what's included, of course. Of course, that must be a substantial uh price difference than He.
Interviewer [00:17:29] Yes, yes.
Participant 3 [00:17:30] We're not going to do it for a dime.
Interviewer [00:17:32] No, uh, then in The difference in dosage forms is still differences between the patented products and the generics.
Participant 3 [00:17:43] Uh and in uhm application.
Interviewer [00:17:48] Yes.
Participant 3 [00:17:49] Apply eh.

Interviewer [00:17:53] Yes, so is Stel the patented one, for example, the pill and then, or a larger pill or a small pill or another pill?
Participant 3 [00:18:01] Yes yes yes yes yes yes yes for sure. You suggest the size of uh pills. That gets sometimes, uh, people sometimes find that annoying.
Interviewer [00:18:11] Mmm.
Participant 3 [00:18:13] Then they are already nauseous and then they become even more nauseous.
Interviewer [00:18:15] Yes, that's all extra difficult for you as pharmacists. But what do you notice then? That it is difficult with the patented products or with the.
Participant 3 [00:18:23] Oh yes, actually always with the preferences.
Interviewer [00:18:27] Ok. Yes. So why do you think that's the case?
Participant 3 [00:18:34] Because that's right? Guess that's probably just a little bit more money and put into that product in that production process, I think.
Interviewer [00:18:41] Hmm. into the patented?
Participant 3 [00:18:47] I don't know that, but I think I'm going to learn that from you.
Interviewer [00:18:48] Yes.
Participant 3 [00:18:49] The patented yes are, they are just a little bit smaller, just a little smoother, just a little bit more colored.
Interviewer [00:18:55] Yes, yes, yes, yes. Let me say something about it. I heard that from my uncle. They have multiple phases of the production process for that patented production. So first look at Oh, this is what we have first, see how the customer responds to it. Oh can this improve? Well, make the second version and then they'll watch again and they'll have a new version.
Participant 3 [00:19:14] Yes, yes, yes.
Interviewer [00:19:15] And the, uh, the generic one? According to him, they mainly look at, uh, that one. They just have a way of doing it and then. Yes, it's not interesting for them because they still deal a lot of money.
Participant 3 [00:19:27] Yes yes yes Oh yes, your uncles have such a company?
Interviewer [00:19:32] No, he's also a pharmacist. It's all a big deal of pharmacies.
Participant 3 [00:19:39] Yes oh how funny. And you're not going to do it?
Interviewer [00:19:40] I'm not going to do it. I do have a friend who does it, but uh, that's it.
Participant 3 [00:19:44] Yes Oh yes yes yes yes. Uh. Funny.
Interviewer [00:19:47] There is something else to add that has not yet been discussed between the two differences.
Participant 3 [00:19:54] Uh, I guess, uh... Can you get fined if you do anything. What does it actually mean to be fined if you like you anyway. Uh, for example, uh, after three years of a pill on the market, he's just making too much of that list. Uh another one.
Interviewer [00:20:18] Ok, can you get fined? Yes, I don't know.
Participant 3 [00:20:23] What that is. Just get in front of the boss.
Interviewer[00:20:25] And yes, I'm not sure that's very appropriate for this research. Tell me, if I said yes, I can do all these things. Yes, but I'm stopping recording.

Participant 4

Interviewer[00:00:08] Can you, oh wait is it you or you?

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Participant 4 [00:00:08] you.
Interviewer [00:00:10] can you give your uh verbal consent to t uh before recording?
Participant 4 [00:00:13] Yes, definitely.
Interviewer [00:00:14] Uh, then maybe the first thing you can do is introduce who you are and what you do.
Participant 4 [00:00:19] I'm ---. Since 1 January, I have been AIOS Hospital Pharmacy at the --- and before that I worked as a public pharmacist for twenty years. first in uh --- for two years, then three years in --- and then, uh, I was head of the outpatient pharmacy at the --- UMC in ---.
Interviewer [00:00:38] Ok, so uh, you're kinda losing everything. Yes, except for the hospital, but uh, that's hard to get into, I heard, uh, there, uh, what kind of uh... In your opinion, changes occur when a drug loses its patent.
[00:00:58] well for the pharmacy, let me say it like this. For the pharmacy, it changes that, uh, there is more supply. So then, overall, there will be several generic parties: Uh, die t uh, who bring the drug to market. Uh, and that gives you market forces and competition, and that does something with a price. So often, the price also goes, uh, of a generic drug, the price goes down.
Interviewer [00:01:23] Mm, now. are there other important aspects that are changing for the pharmacy.
Participant 4 [00:01:31] Well, when the it then does, for example, such a remedy also ends up in the health insurers' preferential policy, so it has to do with the reimbursement status. That kind of thing also plays a role in bringing a generic to market.
Interviewer [00:01:45] Yes, yes.
Participant 4 [00:01:47] Yes.
Interviewer [00:01:48] uh and uh what can you say about the differences in monetary values for pharmacies, so differences in making money.
Participant 4 [00:01:59] Hehe uhm yes, that's interesting in itself because uh what you see is that, uh, for the expensive drugs in particular, the uh, the bounce isn't that big. So there is a decline at the AIP level (pharmacy purchasing price), but mainly because of the margin that uh or generic, uh, drugs reach, that's, uh, it's generally interesting. Yes, especially if, for example, oncolytics are unpatented about things or that kind of thing, it will be uhm.
Interviewer [00:02:32] Mm, now. yes then, uh, then that delta is quite big.
Participant 4 [00:02:36] However, the health insurer now knows that too. so he asks in the sense that it has in his contracts, uhm, they ask if they are negotiating with, in this case, the hospital. Uhm, of course, they also want a, uh, a little prick from that Reef.
Interviewer [00:02:51] I think they mainly take away the money.
Participant 4 [00:02:53] They mostly take away money, yes.
Interviewer [00:02:55] yes yes yes. So then there is not much anymore because the number of generic percentages is increasing more and more.
Participant 4 [00:03:01] Because yes, yes, look at the de, the big boys, so the drugs that, uh, can only make a big deal with. They are now generic uh available. Where you see that, of course, a new medicine comes on the market regularly, which then runs out of patent after about 10/15 years. So that cycle remains.
Interviewer [00:03:20] What are then? Because those are therefore preferred and. So what are the reasons why, say, a patient doesn't use it, so you can make that margin?

Participant 4 [00:03:30] I don't really understand that question.
Interviewer [00:03:31] And what. What are the reasons for a patient to say that? What are the reasons that you can give, say, a product that is not preferred, to the patient? That you can still do that margin.
Participant 4 [00:03:42] If it goes out to the public farm to the patient in the home situation, there's really no reason for that. Unless it is medically necessary for you to deliver a, uh, non-preferential medicine. Otherwise, there are actually no reasons not to do so. And that is mainly due to when someone reacts hypersensitively to. In this case, these should be the auxiliary substances. The active substances in that tablet are in principle the same, otherwise you can't use it, uh, it's not bioequivalent.
Interviewer [00:04:09] So then it goes. But then it goes from uh to a generic to another generic or goes to another uh drug. Because when you say different substances, then.
Participant 4 [00:04:19] ah so uh let's just take the fictional example paracetamol. Uhm You have brand sinaspril brand paracetamol and you have generic acetaminophen, so just acetaminophen from firms A, B, C or D. So at the moment that D is the one I'm pointing at the table. But you can't see that on your phone. Uh. When the paracetemol sinaspril goes out of patent, there are therefore several parties that can bring paracetamol on the market and that price will fall. Market forces. Then the health insurer decides which says I want from manufacturer two, I want I made the best contract agreement with that manufacturer. So that's an agreement between health insurer and manufacturer, the pharmacy isn't even among that at all. So we don't know those agreements either. So it may well be that for those who want to come to you in the uh in the price list, you have the Z-index pharmacy purchase price list, the highest in the list, which is preferred because the health insurer has been able to make the best agreement with it. We come across that kind of jokes. I find that very difficult to explain to a patient, by the way. Because I think, well, I can't really explain it to a patient. Uh, except that there's a lot of stuff under the table.
Interviewer [00:05:37] Uh, but surely that patient doesn't notice much about it because they have insurance anyway, and then what?
Participant 4 [00:05:42] uh no but your medicine is fine and we always had it in the past. I don't think we do that here at the ---, if we had the price on the box. so just state transparently what does it cost you what you get now. And yes then?
Interviewer [00:05:58] So those are certain questions about that.
Participant 4 [00:05:59] Questions can be asked about that. Yes,.
Interviewer [00:06:01] No, that makes sense, yes. Ok uh, are we also uh certain uh agreements, say the difference in how many agreements you make with, for example, a generic company about discounts and stuff? Uhu. Uh, but that guy. Do you still make a lot of money with generic companies?
Participant 4 [00:06:18] Yes, actually. In my previous life, when I was still working in Radboud, I purchased for the Radboud hospital. So that was an amount that was quite large. And yes, there's the generic uh. The generic part that we sell is compared to the masses, but uh, is just a piece of cake. Yes. Uhm. So often that is actually outsourced to the wholesaler to make that, uh, that appointment. that the wholesaler uh for several pharmacies that, uh, kind of one, make an appointment with a manufacturer and who then actually translates that into the price

we pay as a pharmacy. So because then you don't have to be able to sit down with all those generic farmers, uh, too. Uh but can you just uh sail on t uh yeah. And of course.
Interviewer [00:00:00] Ok let's see, uh uh, what about the reliability of the deliveries between patents and generics?
Participant 4 [00:00:12] Yes, that. I think that's a very complicated question, because it is. At the moment, it is a problem and the delivery reliability of medicines anyway, and that does not necessarily have to do with whether something is generic or specialty. What you do see is that, especially under the preference policy with the health insurers, when these become long long-term agreements. For example, the fact that a health insurer makes agreements with such a preferential drug for two or three years is that others say yes, guys, all nice and nice, but I can't make money with it with this medicine now, so I'm taking that off the market.
Interviewer [00:00:51] Ok, so then you get smaller around your pool where you can fish.
Participant 4 [00:00:56] So you do see that kind of thing happening.
Interviewer [00:00:58] But then you have it with you. So with the patent, you actually also have eN and, at some point, with the generics, so does one.
Participant 4 [00:01:04] That's possible, theoretically yes, so you'll still have two. Yes, unless the patent manufacturer says “well, guys, so far and no further, I'll take it off the market too, uh, I'll deduct it from the market, too. That's possible.
Interviewer [00:01:14] ok. So actually. What I understand now is that, say, the uhm attractiveness of the so much profit that the pharmaceuticals make makes the pharmaceutical industry. that actually causes them to move away at some point, which means that reliability is much less.
Participant 4 [00:01:29] Yes, yes.
Interviewer [00:01:30] Yes. And with the patented ones, that is much less because the profitability is much higher there.
Participant 4 [00:01:35] Yes, well, of course, something can always go wrong. Hey Uh CoronavirusYou're passing by. Wuhan is the raw material where the coronavirus is? is the raw materials.
Interviewer [00:01:47] But that's not really a difference between the patented and the generics, because they both suffer from it.
Participant 4 [00:01:55] Yes, but you mainly see that the generic raw materials come from China and India because, uh, the specialty raw materials are often still made in one way or another in Europe.
Interviewer [00:02:07] And they are more reliable. Or is that because?
Participant 4 [00:02:10] Yes, well, but what? What you are increasingly looking at when purchasing is also the sustainability of uh, production and transport. Yes, so if you have to let something come from China or have it come from India, it is less sustainable than facilitating it in Europe. So only the price per cup that works in India and China is much lower than the price per cup in Europe. So that's actually where that's where we're looking for a balance, so to speak. but what would be possible.
Interviewer [00:02:39] Ok, that's an interesting aspect.
Participant 4 [00:02:42] Well, before the IZAs, so the purchasing group at the academic hospitals, production in Europe was a plus compared to having to come from outside Europe. So then you had an advantage in uh. So if we're a price breaker (€0.01 per tablet or ten cents), I

know, of course, it depends a bit on how expensive such a thing is. if your price is usually king, I'll just say. Uh uh, whoever with the lowest price has it, wins the tender behind the academic hospitals. Yes, uh, uh, for a year or two years, or for three years, you're the right party. But now we've said yes, that's not entirely true, because if you include a bit of sustainability, if you have to pay a few cents more for it. But that is made in Europe.
Interviewer [00:03:24] but sometimes, sometimes a few cents really matters, so let's just say relative, I guess.
Participant 4 [00:03:27] Yes, sure. No, so if you: If it's relatively 1 or 2% more expensive or over 5%, yes.
Interviewer [00:03:33] Then again, that could well be a criterion. Not to choose the cheapest, but rather for an uh, for a slightly more expensive preparation.
Participant 4 [00:03:41] Ok. Well, that's an interesting aspect, yes. Uh, this may be a bit uh crazy, but I'm going to try to explain it a little bit. Uhm, sometimes you have one and one patient and they have and then go on a new drug, and it is sometimes useful that there is a partnership between the pharmacy and the, uh, the de de, the production company. So the generics or the patentees? Are there any differences between them? Uh, tell me? Are you going to enter into more partnerships with patents or generics? Or is that something that is not very important?
Interviewer [00:04:19] Uhm, look what was. What I've always found important about appointments is that I didn't try to make appointments for a specific medicine. But I want to try to make appointments for a group of patients. Because I think it's more important to treat a patient properly. Then plug out a medicine properly, I'll just say because those mirrors and beads that such pharmaceuticals give, whether that's a generic or a specialty manufacturer to make that patient use a medicine properly. I actually just want that before it's the condition anymore. Uh, and some pharmaceuticals, especially the specialty manufacturers, are less interested in that, because, of course, they have to make money.
Participant 4 [00:05:03] Yes, because of that one specific drug and those generic manufacturers, we have a little more flexibility.
Interviewer [00:05:09] Ok.
Participant 4 [00:05:11] But it remains that, of course, they want to promote their drug x uh uh.
Interviewer [00:05:17] Yes. No ok, that's clear then. Uhm. Well, drug changes, of course, they happen more in the post-patent market, because, of course, you have more generic brands. uh, what consequences does that have for the pharmacy?
Participant 4 [00:05:33] Hehe. Uhm, so you have much more of the same active ingredient in the same API. You have a lot more manufacturers on the shelf. So, for example, we have a blood pressure reducer from a metroprolol. It has, uh, four or five different strengths. So we have six or seven manufacturers. That's the case with six or seven manufacturers. Uh, every uhm what's the name of the uhm health insurance company chooses their own preference. So it could be that we. Well, we've just flattened ten health insurers in the Netherlands. There are many more.
Interviewer [00:06:08] Yes, I think there are four big ones.
Participant 4 [00:06:10] Four big ones and five or six little ones, so just ten for convenience. Times seven is seventy different. Uhm and then I only have one box on the shelf. So yes, you want to have ten boxes on the shelf, and now count on the amount of space you've lost in the

pharmacy alone for, uh, jokes like this. And back in the day, when I started, uhm, what we were just talking about, made an appointment with you with your generic farmer and they just arranged the whole package and you got an attractive margin. And that was fantastic. That was He, then everyone was happy.
Interviewer [00:06:43] Yes. And then you don't have that many products in the uh.
Participant 4 [00:06:45] No, then you had your entire closet was Teva or Sandoz or.
Interviewer [00:06:49] Then there, for example. Yes, at least if you switch a medication at some point, you won't be left with a box that you think yes, at some point that expiration date is over and then on the way. Yes. Uh yes. What kind of uh differences are there in the post-patent market in the use of drugs? So, for example, is there a difference in terms of quality?
Participant 4 [00:07:14] N No, but basically such a uh is such a generic thing. It must be bioequivalent to the specialty, and that's where, of course, the specialty's registration research involves much more research than, uh, that of the generic. That is why the price can also be a lot lower, of course. Because you do much less research to do, much less risk of failure, because that's all with that specialist. Uhm so. So it should show that the uh has the same level and has the same effectiveness, the same active ingredient. Of course, you should show that kind of thing, because yes, otherwise you can't go, you can't prove bioequivalence. But a generic farmer doesn't have to prove more of that. Basically, you have to show that the medicine is the same as t uh as a specialty.
Interviewer [00:08:02] Yes.
Participant 4 [00:08:02] With the same effect and the same side effect, you can taste yes on those kinds of things.
Interviewer [00:08:06] And is there also a difference? Uh, dosage forms.
Participant 4 [00:08:11] No, not in principle.
Interviewer [00:08:13] In principle, no.
Participant 4 [00:08:13] In principle, no.
Interviewer [00:08:14] Ok.
Participant 4 [00:08:16] Otherwise, it is not bioequivalent.
Interviewer [00:08:17] No, but I mean more of them in larger pills Or are these syringes? That's different, that's what I mean.
Participant 4 [00:08:23] So there may indeed be a difference. You see that. The tablet size may be different. The colour of the tablet may be different, so anything can happen in it. And we're talking about syringes. Then, of course, you have the biologicals, i.e. the molecular antibodies. These are naturally complex proteins that are used for certain disorders, such as rheumatism or psoriasis, etc. And that shows that these syringes are actually different. So they also just do the physical syringe. So the substance in it is about the same, because that is a complex protein stuff. So that's always a little bit different. But in particular, it's just the spray device that's different. And for many patients, that is another threshold that they have to cross to use such a biosimilar, in this case. And so you see, for example, something very trivial like the bluntness of a needle or the bluntness of a needle.
Interviewer [00:09:20] Yes, ok.
Participant 4 [00:09:21] Not that those needles bone, but how, the wider the angle you cut off your needle, the easier it goes into the skin, you can imagine something. So if that angle is a little bit smaller, it feels more painful because then that angle Uh.

Interviewer [00:09:35] And who, say, is that quality higher?
Participant 4 [00:09:39] Uh. People complain more often about such a biosimilar than about a specialty.
Interviewer [00:09:43] Yes.
Participant 4 [00:09:45] Because you know what you have and you don't know what you get.
Interviewer [00:09:47] Yes, that is indeed difficult.
Participant 4 [00:09:49] Yes, it's true too.
Interviewer [00:09:50] Yes, psychologically, that's difficult, yes.
Participant 4 [00:09:53] We do try to supervise when we switch. I know that in radboud, a number of those big switches have had these types of biological medicines. Yes, then you should be really good with both the doctor and the therapy. Because you're trying to get on the same page.
Interviewer [00:10:08] But that's right, that's difficult. Because of that psychology because, of course, you're going to switch from something you trust and really know to something new. Then it's hard to say yes, no, the quality of those generic products is really lower than that and those patents all.
Participant 4 [00:10:21] But we will never say that the quality is lower.
Interviewer [00:10:24] Yes, I meant more of those forms of administration.
Participant 4 [00:10:27] Not that either, because, of course, they were also launched, so they already are. And the joke is patients you're setting it up for new ones. so, of course, you have a flow that lets you switch. And you have a stream that you set up in a new way. You don't hear those patients you put back on it complaining.
Interviewer [00:10:41] No.
Participant 4 [00:10:41] Because they are not used to anything else. Yes, so that, there is also a difference.
Interviewer [00:10:45] Ok. Uhm, are there other aspects that we haven't mentioned yet? You already mentioned sustainability. I hadn't really had it before, but that was a really good thing. We're other things you say that. Difference.
Participant 4 [00:10:58] Uhm. So no. In my humble opinion, generic and specialized seem ordinary in terms of active ingredient, they are identical. It's more like the tablet that might be a bit different. So, based on the things that are added, it's the filler, the colorant, the. That kind of thing. Uhm. But me, I don't believe. Personally, I'm not a believer in the fact that there are a lot of patients who, uh, are suddenly hypersensitive when he, uh, gets a metroprolol from another, uh, other company. So at Radboud, we were already researching. We then did that with trials with an NS, a trial. So that was the individual study. Did you, uh uh, we went blind. So we stopped two blinded capsules and then one tablet pulled one capsule. sounds a bit crooked but all over the specialty tablet, the generic tablet, the tablet with uh with a placebo so nothing in it and then we went. The patient then had to keep a diary to watch. Uhm yes, how they feel at the different times of the investigation.
Interviewer [00:12:12] and those tablets that were different too, right?
Participant 4 [00:12:15] Yes, yes, between the generic and the specialist, just uh.
Interviewer [00:12:18] Because they're in a capsule.
Participant 4 [00:12:21] You can't see which one you're swallowing. Yes, that's where the most hilarious, uh, results come out.

Interviewer [00:12:26] Yes, I get that.
Participant 4 [00:12:27] There are those who feel best when they take a placebo, for example.
Interviewer [00:12:31] Yes, that, uh, that kind of thing.
Participant 4 [00:12:32] Things that remain that kind of thing remain very interesting. Uhm, but you want you to objectify it and you can do that with such. You can do that with a study like that, can you do that? Uh, for that one patient, you can do that. Oh well, you shouldn't have to do that on a large scale. Because it's not ethical, of course.
Interviewer [00:12:46] No, because you can. Yes, yes, yes, no, that's not possible. But you can also be difficult. I'm just saying moving on to a larger group, I think.
Participant 4 [00:12:53] No, certainly not.
Interviewer [00:12:53] Maybe you can do it for Arnhem, but then? Yes, that's different. That's all econometrics.
Participant 4 [00:13:00] So this is really individualized care, so really on the uh the individual. Uhm Are you trying to see what's best for uh for him or her? So that's a laugh.
Interviewer [00:13:13] Well --- I just want to thank you for t uh for this interview.
Participant 4[00:13:16] Yes, you're welcome.

Participant 5

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Interviewer[00:00:00] So, uh, you can. Can you give your verbal consent for the recording?
Participant 5 [00:00:07] I give my verbal consent Consent?
Interviewer [00:00:09] Yes, sorry, English. Uh, well, let's introduce yourself first.
Participant 5 [00:00:14] Uh well I'm ---. I've been a pharmacist for a long time. I'm ---. Yes, this year I am ---.
Interviewer [00:00:25] It does mean you have experience.
Participant 5 [00:00:27] Well uh I have a lot of experience,.
Interviewer [00:00:29] Lots of experience.
Participant 5 [00:00:29] I really have a lot of experience. So yes. Well, that's me a lot. I have experience, that's. A truth like a cow.
Interviewer [00:00:46] For example, what did you do in those forty years? Uh what for?
Participant 5 [00:00:49] Uh. Well, I've done a lot of things, but with pharmacy, I've been working in primary care for about 25 years.
Interviewer [00:01:00] What's that? first line?.
Participant 5 [00:01:01] The first line, uh, isn't in the hospital. I'm just in town.
Interviewer [00:01:05] Is public Yes Yes.
Participant 5 [00:01:07] So I have uh. When I left university, I quickly became an uh established pharmacist at pharmacy ---. Then I was 25 and, uh, a few years later, I was an established pharmacist at the --- pharmacy in ---. And later, uh. Later, they asked if I wanted to join a partnership, a partnership of five pharmacies. At that time, we called ourselves --- Pharmacies.
Interviewer [00:01:33] Was that in Tilburg or something.
Participant 5 [00:01:35] Yes. Back then, --- were pharmacies and we actually wanted to expand even further. But the youngest and oldest did not dare to make any more investments. And that's when we were actually taken over by Medic. I thought I'd like that. But it started anyway. Uh yes, right?

Interviewer [00:01:52] Wasn't fun.
Participant 5 [00:01:53] But I wanted to be able to lead. But you also need to be able to receive the leadership, but I feel like this is, uh, a lot of things, very much, uh, uh... Yes. Which I hated. Yes, maybe I'll have to deal with appointments differently if I, uh, would.
Interviewer [00:02:07] Yeah yeah uh uh then you're with me.
Participant 5 [00:02:10] That's when I went to the hospital here. I started in't Carolus.
Interviewer [00:02:13] Yes yes yes uh.
Participant 5 [00:02:15] Harriete set up the pharmacy.
Interviewer [00:02:16] Yes. So. Uh, even you joined soon.
Participant 5 [00:02:20] Or uh uh I think about it after three years.
Interviewer [00:02:22] Oh ok, but I didn't even know that. Look, I thought it was always my way, they always sit together, always together.
Participant 5 [00:02:30] But Harriette did the first and first periods alone. That was in't Carolus and then they also wanted to open a pharmacy in gzg. and an outpatient pharmacy. And then it became quite difficult for Harriette with the growth and those pharmacies and then I joined.
Interviewer [00:02:47] Ok. How funny.
Participant 5 [00:02:49] I still have a lot back then. Uh yes, I did. I was hired for Harriette, but they also assigned me tasks for the healthcare institutions at the time.
Interviewer [00:02:57] Yes.
Participant 5 [00:02:58] For baxteren, that's what I did in --- too. That actually caused all healthcare institutions in --- to bathe too?
Interviewer [00:03:02] Yes, yes.
Participant 5 [00:03:04] So I also had a lot of experience back then. a lot of experience.
Interviewer [00:03:08] Well, yes. If the first question is Uhm, what do you think are the most important aspects that change when a product loses its patent in the pharmacy?
Participant 5 [00:03:17] When a product loses a patent, competition opportunities arise. Because uh, a manufacturer would love to recoup that research. So today, she uses them. Uh yes, if you specialize in the price of a specialty, the research costs are stopped and the profit margins are stopped. Because they know when I have the patent, I can earn money.
Interviewer [00:03:42] Yes.
Participant 5 [00:03:43] And if it's a yes and it turns out that it's a successful drug. And if it's a successful drug and the patent expires, then uh, others would love to make it too. They don't have to do that research.
Interviewer [00:03:57] No.
Participant 5 [00:03:58] Yes, maybe.
Interviewer [00:03:58] Yes, just a little bit Yes, quality research Hey.
Participant 5 [00:04:01] They just need to do equivalence research. They no longer need to discover the active substances. So no. They have to do limited research and then, uh, yes, others can piggyback on the prize, on the success of an uh specialty. Yes. But at a much lower price.
Interviewer [00:04:19] A much lower Profit Margin?
Participant 5 [00:04:20] Yes. Yes. competition ensues. And in itself, of course, it is beneficial for healthcare costs. Yes, because they then go down either.
Interviewer [00:04:31] And for the pharmacy.

Participant 5 [00:04:32] Or uh and and for the pharmacy. Well, of course, I've still experienced the old situation.
Interviewer [00:04:39] Yes.
Participant 5 [00:04:40] When I was young, it was really a special world. Yes, the government made up yes, of course.
Interviewer [00:04:46] The patents sometimes take a long time.
Participant 5 [00:04:47] Uh yes, it was really a special world back then and then the generics came along. And uh, back then, pharmacists were probably still a little reluctant to switch to uh uh unbranded. Especially that. That actually changed very quickly, because uh, a generic company that you had at the time. There were also, uh, when the Netherlands itself still had generic pharmaceutical chemistry factories, had a factory in Haarlem. Yes, you don't remember all that.
Interviewer [00:05:14] That doesn't tell me no at all.
Participant 5 [00:05:15] Then there was a factory here so we went and, uh, and Brocacef also had a generic gym. It had a factory. Ok, they had gympharma, so the big wholesalers had their own factories and then, uh, they were also going to promise a lot of discounts on those generics. So pharmacists were persuaded to provide cheaper medicines with an even more favourable profit margin.
Interviewer [00:05:39] But since then, the uh preference policy is that?
Participant 5 [00:05:41] And then the health insurer thought but we don't like that. No. Look, now the generic is getting richer, uh, is the pharmacist getting richer? So those Hey, those guys just take even more profits. So uh, back then, the health insurer came up with that preferential policy, uh, for health care costs. Because that was a generic company and uh a cure for uh uh yes, I'm just saying what sells for €50 and gives the pharmacist a €40 discount or a €25 discount. Ah yes, those health insurers are not getting along with it. and uh so when, uh, yes, a game naturally came into being.
Interviewer [00:06:24] Actually, did the profit margin mainly go to the pharmacy?
Participant 5 [00:06:24] Yes, yes, yes. And now, uh, now the profit margin goes if you say uh now the health insurance company that started with uh...
Interviewer [00:06:32] Yes, now it actually works. Now it mainly goes to the health insurers.
Participant 5 [00:06:34] This refers to today's costs. Yes, so then they did a preferential policy uh uh uh, they didn't do a uh uh uh and the health insurer said and you're just going to share your list of prices. Yes, oh, is that really just one and but, uh, yes, €, 40 discount and so is a pharmacy, so actually, uh, it's just a tenner.
Interviewer [00:06:55] Hey, so they know, uh, they'll come back after that, actually only a tenner. Uh. And yes, that manufacturer really only makes a tenner on it. So he says and you want to pay for ten bucks, then I prefer you. So that's when it really went to the patient. and that has also come a bit of an intermediate layer and that at some point. Uh, the health insurance company started thinking, oh, is there a margin on it. Of course, I can also say he's your medicine uh uh uh I I'm taking medicine b €12 and uh then you'll give me €2 to the health insurer so, among other things, uh.
Participant 5 [00:07:32] Oh, the health insurers were also going to make a profit.
Interviewer [00:07:34] They also participated. Well, but that's under cover or I don't know. Yes, so the one that one, that happens too, but we have no insight into that.

Participant 5 [00:07:42] Yes, yes, then go, but whichever way you look at it, that money goes to that health insurer, which actually, uh uh, returns it to the patients.
Interviewer [00:07:54] So that would. That should benefit them.
Participant 5 [00:07:56] That's what they should say. H Yes, that.
Interviewer [00:07:57] Should benefit the premium.
Participant 5 [00:07:59] Yes. Well, it should benefit the premium. But where is that bounty then? From, say, healthcare says that being funded is another thing. But uh Should benefit the system if the shortest ones get lower.
Interviewer [00:08:09] . Of course, we've been talking about, say, the effects of the whole thing all the time. But, uh, what are the differences in, say, the pharmacy? So yes. So now, now, now. Because we've already talked about the previous situation for preferential policy. But what now.
Participant 5 [00:08:27] And now is. So the whole direction is no longer with the individual pharmacist and now the entire control lies with the health insurer. It draws up lists.
Interviewer [00:08:37] So that margin is no longer there, uh, for the pharmacist.
Participant 5 [00:08:40] Uh that one is, it's limited, maybe it's still a very small one. Yes, there is still a bit of it.
Interviewer [00:08:43] But it only applies to preferential funds, right?
Participant 5 [00:08:46] Yes, there is still a bit of margin, but not anymore uh uh. Not if it ever was.
Interviewer [00:08:51] And that little bit, how important is that for the pharmacy that that?
Participant 5 [00:08:54] Yes, it's quite important. And then maybe Harriette knows even better than me. Oh, because I'm a little less involved with uh now. I'm not at the bargaining table for the discount.
Interviewer [00:09:02] No.
Participant 5 [00:09:03] Yes, they can't give away as much discount as they did in the old situation. Yes. With the preference policy.
Interviewer [00:09:09] And uh. Well, so you have a preferential policy and that is for preferential funds. But then, for example, you also have pills that, uh, are your medical necessity, so you attribute something else. And how big is that for the pharmacy?
Participant 5 [00:09:24] Yeah, well, I just have to tell you about that generic, uh, with that preferential policy. It was actually getting weirder. Because the factories disappeared from the Netherlands and they went to India or China. Or I know a lot of things. And so, uh uh, in recent years, we've also had a lot to do with uh... contaminants in medicines, including sartans.
Interviewer [00:09:48] Contaminants.
Participant 5 [00:09:50] Yes, there were contaminants.
Interviewer [00:09:51] What does that mean?
Participant 5 [00:09:53] Yes, unsound, uh, to get the uh tox. Well uh, that there are carcinogenic carcinogenic substances in the tablets so that certain preferential policy medicines could no longer take place.
Interviewer [00:10:08] Ok.
Participant 5 [00:10:08] Yeah so it's actually kind of uh uh shot. But uh so cheap that you officially Do those drugs all have to be tested?
Interviewer [00:10:20] Yes.

Participant 5 [00:10:21] Both in the country of origin and as soon as they also enter the Netherlands, I believe. But still. Uh. And are there, uh, because of that production in the distant countries, despite the strict rules, right?
Interviewer [00:10:34] Well uh ok.
Participant 5 [00:10:35] Repeatedly take medicines.
Interviewer [00:10:37] There. Yes, we say that's actually one of the last questions this, but I think you did call her uh... Sure, I'd say.
Participant 5 [00:10:43] Yes, but you were there for a while now. You just asked.
Interviewer [00:10:46] But uh with, uh, with medical needs, I asked.
Participant 5 [00:10:49] Yes, medical necessity.
Interviewer [00:10:49] Although for. Yes, for example, the percentage of the products is what you're for, but that.
Participant 5 [00:10:55] For us, it's only very low and low. Well not 1%. Oh ok, then let's do uh yeah us.
Interviewer [00:11:04] Because there, because you can still make a profit on those medical necessities because you...
Participant 5 [00:11:08] No, because not me. No, because if we admit a lot of uh to medical health insurer, that's who, uh, he actually wants us to buy everything preferentially. Yes, and if we deliver that if we prefer everything, we'll get it, uh, by default. Then we get the standard rate, for example. Yes, but if we deliver less than one percent less than 99% preferentially, for example, we will only receive €5.50 10% less.
Interviewer [00:11:37] Yes.
Participant 5 [00:11:38] Yes, the numbers may not be accurate, but that's the principle?
Interviewer [00:11:41] Yes.
Participant 5 [00:11:41] So uh. And then? Yes, if you then have to sacrifice 10% of your delivery rate for all patients? Then, of course, that's uh, yes, sour stuff, so they've built in a very small margin that you can, uh, uh, go along with medical needs. So we are very critical of that.
Interviewer [00:11:59] Yes, I get that.
Participant 5 [00:12:00] We make and uh we make us. We're really going to investigate. When someone says I want uh. What should I say?
Interviewer [00:12:08] Yes, I don't like this remedy. T t t Yes, you can do anything.
Participant 5 [00:12:13] Omlodipine I want norfask or I want instead of esomeprazole.
Interviewer [00:12:15] But that is. Oh, that's.
Participant 5 [00:12:17] But I really want nexium because I can't.
Interviewer [00:12:18] You. That's that's from. That of uh drugs. that's about certain substances and, of course, uhm, that you change certain generics and then yes.
Participant 5 [00:12:28] That could be possible. but most of the time, people want the specialty.
Interviewer [00:12:31] Ok.
Participant 5 [00:12:32] Ok, most of the time.
Interviewer [00:12:33] Most of the time, yes, but then paying?
Participant 5 [00:12:35] but sometimes they want a different brand. But then we're really looking at oh you want this to be the trial eh and that consists uh uh the remedy What you want consists of these ingredients, the remedy that is reimbursed uh consists of those uh ingredients? Uh z. Are we seeing something now and what are your complaints? Well, we now

see that there are ingredients in those tablets that can explain that you have the symptoms that justify you want that other medicine.
Interviewer [00:13:00] That's really critical, yes. Yes, yes, yes, uh.
Participant 5 [00:13:03] So that is rarely yes.
Interviewer [00:13:05] Uh. But that one.
Participant 5 [00:13:07] Coming to the conclusion that, uh, the patient has a point. Yeah, he can't stand it then.
Interviewer [00:13:12] But the price difference between that preferential and that specialty is of course very big, right?
Participant 5 [00:13:18] Yes, it's a preference, a specialty is big, but between generic and generic isn't big.
Interviewer [00:13:23] No, no.
Participant 5 [00:13:24] That's not big.
Interviewer [00:13:25] So. So then you do the.
Participant 5 [00:13:27] But if we don't stick to the list.
Interviewer [00:13:29] Mmm. Yes, but if they have medical needs, for example, they want to know generic, did you know that, you won't do that or that whole test?
Participant 5 [00:13:35] Not by a long time.
Interviewer [00:13:35] No, that's that.
Participant 5 [00:13:36] Medically, we often don't do that. Well then we say, uh, yes, we've looked at the composition and we don't think it's medically irresponsible to provide you with the medicine that is preferred by the health insurer. But we say you can have it, but you'll have to pay for it yourself.
Interviewer [00:13:55] Yes, yes, no, that's logical. Yes, then it is possible. Uhm, what about the reliability between deliveries, between the uh patents, products, and the generics?
Participant 5 [00:14:05] Uh, between the uh specialty and generic?
Interviewer [00:14:08] Yes, yes.
Participant 5 [00:14:10] Mmm. Well, actually, it's like uh... If a patent expires and there is a generic name, you have a good chance that specialite uh will go out of the market in the long run.
Interviewer [00:14:23] yes.
Participant 5 [00:14:24] so That disappears.
Interviewer [00:14:25] Yes yes yes.
Participant 5 [00:14:26] Hey so uh A lot of brands have disappeared.
Interviewer [00:14:28] So it's good, but that's logical. But uh, it's with more of you have a market, uh, with just a patent. And at some point, you'll have a market with nothing but generics. That's usually what happens. That's usually what happens.
Participant 5 [00:14:38] Uh yes, then it could be that uh that uh and the patents. But that generic market has caused us to have shortages because the price negotiations are so uh intense. Yes. And the health insurer that the manufacturer thinks this is actually not interesting for us to come on the market with a product at all. That's quite annoying when you can't deliver conventional medicines. just to say something. Cotrimoxazole Yes, ok,.
Interviewer [00:15:07] Yes, you don't know that.
Participant 5 [00:15:08] No,.

Interviewer [00:15:08] There is suddenly no such thing as a very common antibiotic.
Participant 5 [00:15:12] Oh.
Interviewer [00:15:13] And. And that is an antibiotic that is often used for urinary tract infections.
Participant 5 [00:15:18] Yes. And then? What should you switch to then? That's usually the case with us.
Interviewer [00:15:22] Wring around a lot of corners. Oh.
Participant 5 [00:15:36] Then it cannot be imported either. The inspectorate can give generic permission that medicines may come from abroad. and if there isn't any from generics yet, then uh, permission, they also want to give individual permission to a pharmacy. So we now have an individual permission for that product to import it from abroad.
Interviewer [00:15:57] Yes, but yes, at a high price, right? Yes and.
Participant 5 [00:16:00] Then you have that again and I may not be able to lose all the costs.
Interviewer [00:16:06] None of them convenient.
Participant 5 [00:16:06] None of them convenient.
Interviewer [00:16:07] No, uh... Well I think the next one should explain a bit. Uhm, you have, say, if you're a me and a patient who's going to receive a uh treatment, a medicine. And sometimes it's useful that the uh patient gets a certain explanation or is it something that makes it easier to deal with that, uh, that product with medication? Do you have those kinds of uh partnerships with generic or patents, uh uh, pharmaceuticals?
Participant 5 [00:16:35] Uhm yes, of course, we have first, we do a lot of initial issuance guidance and the first issuance guidance, uh, may include a video from the manufacturer.
Interviewer [00:16:47] Ok, too.
Participant 5 [00:16:49] We make checklists and sometimes the manufacturer also checks, uh, if it's okay. If there are any compensation problems, it's with uhm effe patenting or with generic ones or with.
Interviewer [00:17:01] Uh well, both actually.
Participant 5 [00:17:03] hmm both. Yes, yes. It's not that much of a difference and they both do it a bit normally.
Participant 5 [00:17:07] No. Well, if she's yes, so already. And that is not possible with both.
Interviewer [00:17:10] Yes, yes, ok, yes.
Participant 5 [00:17:12] If they have good educational material, we would be happy to make use of it.
Interviewer [00:17:16] Yes. Ok. Uh, I also want good drug changes, which, of course, happen more in the post-patent market than they do in the post-patent market. So the. Yes, it's not a good Dutch translation for patents after that year, but I think that's such a stupid word. Yes, it doesn't work. Uh, how does that affect the pharmacy? The drug changes.
Participant 5 [00:17:40] What benefits.
Interviewer [00:17:41] The consequences?
Participant 5 [00:17:42] Oh what consequences?
Interviewer [00:17:43] Yes.
Participant 5 [00:17:44] Lots of explanations.
Interviewer [00:17:46] to the patients?

Participant 5 [00:17:47] Actually, it causes, uh, anxiety. just look because if you have one because uhm, you can switch a brand on a preference list. If it's the one year you get enalapril from uh sandoz and then the following year from Teva.
Interviewer [00:18:03] Yes, then you're sitting up anyway. Watching that one again from huh.
Participant 5 [00:18:06] Other boxes.
Interviewer [00:18:07] So.
Participant 5 [00:18:07] Yes, I do have it, uh. With assistance, we can still drive us crazy.
Interviewer [00:18:13] Mmm yes.
Participant 5 [00:18:14] Don't like people.
Interviewer [00:18:16] That's not nice, not for the pharmacy.
Participant 5 [00:18:18] Yes, his other brands always have to deliver.
Interviewer [00:18:20] yes. And for, say, pharmacy work. How uh.
Participant 5 [00:18:26] Yes, you should always be very careful that when there are new lists you'll sell out the old brands and put on a new one.
Interviewer [00:18:36] Mmm. Yes, you should, then you should. Should we pay extra attention too.
Participant 5 [00:18:39] You should also pay extra attention. Yes, well, that can all vary and, in addition, the focus lists can also vary by health insurer.
Interviewer [00:18:46] Yes.
Participant 5 [00:18:47] So before, for example, you only had Zantac.
Interviewer [00:18:49] These are some focus lists. Yes, what are the focus lists?
Participant 5 [00:18:52] The preference lists? So the list per health insurer also differs? Yes, so one health insurance company says uh.
Interviewer [00:19:00] Yes, that world you know, the n n has Aurobindo and the other one has Sandoz or something.
Participant 5 [00:19:04] Yes, it also varies, and so uh, uh, you used to have something in stock only from Novo Nordisk or something? Hey And now in stock from various brands.
Interviewer [00:19:13] Yes, yes.
Participant 5 [00:19:14] Yes, yes. And ICT also needs to be set up. Hey. It is also fully furnished.
Interviewer [00:19:20] Then you can go a little further with that.
Participant 5 [00:19:21] Uh comes directly into the screen. Now with, uh, to your AIS Pharmacy Information System. What the preferred remedy is.
Interviewer [00:19:28] Ok.
Participant 5 [00:19:29] That all needs to be arranged.
Interviewer [00:19:31] Mmm. Good thing yes. Oh, that needs to be set in an extra way when they switch again.
Participant 5 [00:19:37] Yes yes, yes and what is preferred He.
Interviewer [00:19:40] Yes.
Participant 5 [00:19:40] So you're thinking uh oh someone has a headache? Sumatitram. I'll type that and then you should also take a look at uh, I'll take a look at the good one, if it's the preferred one. You also have the lowest price guarantee. Yes, all kinds of things.
Interviewer [00:19:55] Yes, ok. Yes. Uh, well, okay? Are there also differences in the uh die? You've been wearing that for a while. Uh, have you already highlighted the quality of, uh, the

drugs? Is that the difference between those patented products and that, uh, the generic ones? Of course, they are kind of the same because they are the same.
Participant 5 [00:20:15] Yes, because they are allowed on the Dutch market. Yes yes yes. So actually, the quality should be the same, but there has still been quite a lot of failure. Uh. With generic drugs.
Interviewer [00:20:25] Ok.
Participant 5 [00:20:27] A failure due to these contaminants and outages The fact that it will be less interesting to market things in the Netherlands L should be the manufacturer of or the generic one.
Interviewer [00:20:37] Yes, but that's not. That's not necessarily almost nothing either. Yes, but that's not necessarily about the quality of the medicines, but more about the deliveries. Yes, yes, yes. And uh, are there also some differences in the forms of administration of the drugs?
Participant 5 [00:20:51] Oh yes, sometimes that's yes. Yes, with puffers, that can be. Then they switch to generic ones and then uh and then uh.
Interviewer [00:20:58] Yes.
Participant 5 [00:21:00] Then it is possible that the forms of administration are different.
Interviewer [00:21:03] And is? That quality of.
Participant 5 [00:21:04] It is quite difficult with puffers, because then you are used to one device and then it is another device.
Interviewer [00:21:09] Yes, but is the quality of the UH dosage forms also different or...
Participant 5 [00:21:13] Can be different, when it comes to puffers, is that an entire study on release? That's about lung deposition. Mmm. What ends up in your lungs? That can be different from an uh.
Interviewer [00:21:26] Yes. Well, it.
Participant 5 [00:21:28] It arrives in your lungs. Sometimes these particles are too small, it's only right away.
Interviewer [00:21:32] And which ones are then? So which ones have fewer complaints? The patented one or the generic one?
Participant 5 [00:21:38] Uh, well, the uh, with that patent, of course, you can't compare it to other things. as soon as The generics arrive, you'll have different devices and uh. Yes, yes.
Interviewer [00:21:53] Yes.
Participant 5 [00:21:53] As long as it's still a specialty. Is there little competition.
Interviewer [00:21:59] Yes. Yes, well, you can do that. Can that be trickier?
Participant 5 [00:22:04] Well, it's also possible. It's also possible with that specialty. Uh uh, bad thing. It can also be a bad thing.
Interviewer [00:22:11] Yes, I still have that packaging here. But uh, that you have a difference between the data t, for example?
Participant 5 [00:22:17] Actually it is like that. Uhm yeah. Uh, when it was still a specialty market yeah it was much clearer for people. Oh, I have to take this for my heart and this is for my lungs and this is for my blood. But when it all became generic uh. For example, Sandoz has a generic line. All those boxes look the same.
Interviewer [00:22:44] Yes.
Participant 5 [00:22:45] That has actually become much, uh, more annoying for the patient.

Interviewer [00:22:50] Yes. And then it is also difficult for you. You all have to go there. You all need to make sure they're really the good guy. Uh, that's actually you guys. Yeah, kind of your responsibility somewhere.
Participant 5 [00:23:00] when it was still a specialty market. Yes, did the manufacturers have the most? Yes, the most colorful boxes. And was there no line in it? Yes. Now there is a line in it. So then the pharmagemi and that one just had the same thing. And gym pharma and what other brands did we have? All the same boxes. Later, they came up with that. All right, we have a line. Then I'll create the cardiovascular line, then we'll put on a red line.
Interviewer [00:23:27] Yes, say I have a blue stripe, but the logo was a pin.
Participant 5 [00:23:33] Yes, that's not much of a difference, yes, no, that day. Then all those patients have to go look at those boxes. You know what I mean.
Interviewer [00:23:40] Yes, I know what you mean.
Participant 5 [00:23:42] We can take a look at the return bin for medicines here. Then I can show it to you.
Interviewer [00:23:46] I get what's going on.
Participant 5 [00:23:47] Yes, you get it.
Interviewer [00:23:48] Yes, as long as I understand it, I can show it properly, it will be fine. Uh, isn't there something you'd like to add? Between the differences between patented products and generics. What's changing or who.
Participant 5 [00:24:01] Uh, well, I'd actually like, uh, I think yes, and then uh, when a patent expires, because the specialist also makes its price attractive so that the patient can, uh, keep using the old familiar medicines. Mmm.
Interviewer [00:24:23] And. But yes, of course you have them.
Participant 5 [00:24:24] But they don't do that.
Interviewer [00:24:25] No, but those traits.
Participant 5 [00:24:26] who look at the global economy.
Interviewer [00:24:27] Yes.
Participant 5 [00:24:27] So someone who, uh.
Interviewer [00:24:30] But isn't the patent expiring all over the world? Or is that?
Participant 5 [00:24:32] Yes, but still, they're not just going to lower their uh drug prices. Well, the manufacturer, uh, who has a specialty, always looks, uh, he'll always watch from that country, I can ask for that price, uh, and they're going to charge the maximum prices, because if they're going to lower that, that's what, uh...
Interviewer [00:24:57] Yes. Look.
Participant 5 [00:24:58] influence on The other countries.
Interviewer [00:24:59] Well, good.
Participant 5 [00:24:59] Yes, that's also price policy. Yes. Yes, and whatever, they don't necessarily have the same one. Uhm. But I would.
Interviewer [00:25:07] But they No, yes, there are economies of scale and stuff. This is all the case with the generic companies, which are much better specialized in this.
Participant 5 [00:25:14] Yes, something like that.
Interviewer [00:25:14] So I think you can do a lot better there.
Participant 5 [00:25:16] If Losec goes out of patent, I would love it.

Interviewer [00:25:19] What you'd actually like to see is her collaborating with such a generic company. I also believe that happens sometimes. Some, some of them, that's actually best.
Participant 5 [00:25:26] Novartis and Sandoz do that, but the Novartis product goes off the market and exactly the same medicine comes in the generic box. Yes, it would, but that's nice.
Interviewer [00:25:35] Yes. That would actually be the best solution for me. Hey. Yes, that's a good thing, then you'll have to go back to that collaboration.
Participant 5 [00:25:43] But sometimes people still don't believe that, huh? Well, you have the same Sandoz medicine and it has remained exactly the same. No, but that specialty was much better. it looks the same, but just because the case changes, they don't want it. And then you can see from the RVG number, so if you have a specialist.
Interviewer [00:26:06] And yes, it can be the same thing. Yes.
Participant 5 [00:26:08] Yes, and then generic, they're on the fact that uh uh, the uh box of RVG is 456 is 123.
Interviewer [00:26:15] Yes, no me. I know what I mean by that.
Participant 5[00:26:17] You know what I mean.
Interviewer [00:26:18] Yes, thanks for the recording, by the way.

Participant 6

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Interviewer[00:00:01] Could you give your verbal consent for the uh to do h. Thank you Yes uh, could you maybe do an uh before the proposal round first? Yes, can you tell us who you are, what is your experience in pharmacy?
Participant 6 [00:00:15] Uh I'm ---. Or uh uh, a pharmacist for fifteen years now. Yes, fifteen years, uh, eleven years of working in the public pharmacy in ---. Four years ago here.
Interviewer [00:00:30] Yes.
Participant 6 [00:00:31] Uhm, public pharmacy. I did an internship, research, internship before my studies at Organon, so I also worked at the uhm factory. Yes. Did research and saw how things work there.
Interviewer [00:00:44] It's also funny that you have that included.
Participant 6 [00:00:46] Yes, so I've seen some of that too. Uh, well, mostly public pharmacy. But with a lot of baxter patients.
Interviewer [00:00:55] Yes. Yes, that's also a completely different one, of course. Yes no. The other situation with the baxter included.
Participant 6 [00:01:02] So they also have little trouble with the health insurer, so then.
Interviewer [00:01:06] But that one, too. You are not bothered by it. okay Some of them, some not the ones I had in the field, because that was just an institution, so it also pays for the pharmacy.
Participant 6 [00:01:14] So then you are not bothered by the health insurer. And here you have them all.
Interviewer [00:01:19] Yes, it does bother you. Yes, yes, I told my dad a little bit about it yesterday and he did say that it's kind of like problems sometimes. Uh, there are.
Participant 6 [00:01:26] However, problems are arising.
Interviewer [00:01:27] Created. Yes, uh, uh, ok, uh, to the first question, uh, what kind of changes do you think happen when a pharmacy, uh, when a drug loses its patent for the pharmacy? Uhm.

Participant 6 [00:01:41] The main change is that instead of one product, you have to stock multiple products.
Interviewer [00:01:48] Yes.
Participant 6 [00:01:49] Because you are going to deliver multiple brands. Uhm. Plus a bit of explanation for the patient. Patients who lose their way because they get another box. Well, we've gotten used to that over the past ten years. I thought it was the worst thing in the beginning. And now people say oh another box at least.
Interviewer [00:02:12] Ok.
Participant 6 [00:02:13] A large part of people. so yes. When the first year or month was a preferential policy. then everyone was angry at the counter. This is not what you need. It's a whole drug, but from a different factory. and now they are used to getting a different box every three months or because it isn't there or because the health insurer has appointed another box.
Interviewer [00:02:37] so they're getting used to it a little bit?
Participant 6 [00:02:40] Yes. So, uh... Without the preference policy. because When the patent expires.
You just have a medicine box lying around. those people are used to that. The moment the patent expires, you're going to be the cheaper for you.
Interviewer [00:02:59] Basically deliver the main label. Formerly.
Participant 6 [00:03:02] Yes, we have the main label sandoz here so we have drug 1 out of patent so you're supplying sandoz from another drug, medicine b goes out of patent so you're delivering the generic sandoz just fine. The patient understands that. Uhm easy to explain.
Yes, and that's fine. So then, as a pharmacy, you will be selling wo brands with ALS. Uh, the ultimate goal is that the brand will be phased out because everyone will use it cheaper.
Interviewer [00:03:33] Yes.
Participant 6 [00:03:33] Except for a few. But yes, you can sell that by saying I'm going to order it and just for you. Fine.
Interviewer [00:03:41] But they pay for it themselves, right? Yes.
Participant 6 [00:03:43] Yes, that is That's still possible. But now that the health insurers have started to get involved. Yes, that is very annoying, because then you just have to go for four brands.
Interviewer [00:03:54] Yes, because you have four main insurers and they usually all have others.
Participant 6 [00:03:58] Others.
Interviewer [00:03:59] Preferred.
Participant 6 [00:04:01] And that's kind of the downside. But that has not so much to do with the expiration of the patent and that is the result of the expiration of the patent. As a result, uh, no crazy manufacturers are going to counterfeit.
Interviewer [00:04:15] Yes.
Participant 6 [00:04:16] And that's what they still think for the insurer. There is profit to be made here. This is what I'm going to bet on. Yes. So it's not so much making, but rather what the situation is right now. And yes. Yes, that abbreviates it. Just that if the patent expires and a cheap medicine is counterfeited, you can sell well and the logistics are easy to manage. Yes, and then they know sandoz, too. Oh yeah, you're going to convert so much, so I'm going to make so much.

Interviewer [00:04:43] Yes, that's easy, yes. Yes, ok.
Participant 6 [00:04:47] So in itself. And a patient finds that easy to sell and a great way to keep costs low as well. That a manufacturer can earn something from their research. It's also complete.
Interviewer [00:04:58] Yes, that's completely logical, they put a lot of money into that then.
Participant 6 [00:05:01] Uh uh, sometimes when you think of the latest models, I think €1,000 per capsule is €1,000 per capsule. Then I think hmhm. is that all the way.
Interviewer [00:05:11] Yes, I have to say I'm not yet. I'm not sure, uh, I don't know much about how they get those prices up, but it depends on how much you want the drugs you want. Uh well no. How much money you've put into it. Yes, how many substitutes are there. So yes, that.
Participant 6 [00:05:29] Do you believe you got a little bit of it? You've made the nineties and 2000 some big discoveries, but especially when it comes to diabetes, cholesterol lowering drugs?
Interviewer [00:05:42] Yes.
Participant 6 [00:05:43] Those things.
Interviewer [00:05:44] Yes.
Participant 6 [00:05:45] And about half of the Netherlands is affected by this.
Interviewer [00:05:47] Yes.
Participant 6 [00:05:48] So they came on the market for €90. Go with the patent box. Back then, they also had €30 per box. Well, that's fine.
Interviewer [00:05:58] Yes.
Participant 6 [00:05:58] But they can also market it because half of the Netherlands will use it. They can do with them simply have very large volumes.
Interviewer [00:06:05] Now a patent or five years.
Participant 6 [00:06:07] Uh also changed. But yes, it's a bit of a strange situation so uh you've got your yes, you're just saying it discovers a speck of dust. Yes, then you have 10 to 12 years, you have, uh, market and development, so you're a bit up to it, uh, yes, because you've already discovered the substance. But yes, then you will have 8 to 10 years. If you're still selling it, you're a bit ready with your product. You've always really benefited from it, but then you've worked out a lot of strategy, uh, uh, uh, because you've already lost those 10 to 12 years and lost yes to research, so you can say yes, that doesn't really count as a patent. And most of the time, I do believe that they win and I think you have. After that, you also have all the strange things that you can change something so that they have a patent even longer.
Interviewer [00:06:50] Yes, then they are indeed doing that extension.
Participant 6 [00:06:52] Yes, well, we don't know what it is, but uh, I'm telling it true. We uh. To be quite simple, they have actually launched a drug. But now market it for him, for high blood pressure.
Interviewer [00:07:03] Yes.
Participant 6 [00:07:04] We have researched this with the normal population. and then Can we just do it for so long Before that indication, we patented this substance works, we invented that indication. When it's on the market, they think: Oh, maybe it also works for high blood pressure in children. Then Are they going to research children, are they applying for a patent for that indication in children?

Interviewer [00:07:28] and when it's prescribed for children? are you only allowed to prescribe their brand, even if there is a generic?
Participant 6 [00:07:33] Ok, but at some point, that other patent is going to expire, right? Yes, you would say. But then they're going to try this way anyway.
Interviewer [00:07:41] Ok yes. That Yes, they are all loopholes and they try everything in them. Yes, yes, uh, yes, I've read that a bit too, so yeah, well, it's with that, uh, with those things, with the market.
Participant 6 [00:07:51] Yes, it is a very special market.
Interviewer [00:07:54] Yes.
Participant 6 [00:07:54] It makes a difference that you do have some background knowledge.
Interviewer [00:07:56] , but yes, uh uh, it's really bad to come in.
Participant 6 [00:07:59] Even if you tell someone on the street, I sell my products at a price I buy them at.
Interviewer [00:08:06] Yes.
Participant 6 [00:08:07] That's what everyone falls off their seats. Well, no one does that either. Surely you don't earn anything on that either.
Interviewer [00:08:10] No, but that's that. If you don't have much choice, that's where the pharmacists have to do them now.
Participant 6 [00:08:16] That's the way it is in the pharmacy world and I get my money from, uh, prescription rules, yes, a bit of a discount on a €0.20 cent box.
Interviewer [00:08:24] Yes, yes, that's the second question, by the way, is, what a difference in, uh, the money, but that already works. That yes, that's really positive about uh bent.
Participant 6 [00:08:34] Well, in itself, uh... The idea of now the. When I specialize in purchasing and purchasing.
Interviewer [00:08:43] Yes.
Participant 6 [00:08:43] Then you get an extra percent discount. Fine, but uh, the moment I'm going to buy a generic and I tell factory sandoz I'll buy everything from you. Can I also make an appointment with sandoz?
Interviewer [00:08:58] Yes.
Participant 6 [00:08:59] And then I do get a discount on a lower amount because I still get 90% for my medicine from sandoz. Can I still negotiate a good discount on that?
Interviewer [00:09:10] Yes.
Participant 6 [00:09:11] So then it goes well. But now that the health insurers are involved and I can only buy 20% or 15% from Sandoz.
Interviewer [00:09:20] Mmm yes, right away. Yes, yes, because the rest is all supplied and then all preferred.
Participant 6 [00:09:26] So they're all preferential. This is all done via wholesale, but then again, all calculated via the wholesaler.
Interviewer [00:09:32] why do you think it's there then that 15% is still open? You would say about that health insurer, who sees that too, right? I also think yes, we should have that too.
Participant 6 [00:09:40] Yes, well, uh... So the health insurer. She wants everything anyway, but I don't think she. Pharmacists have always been too innovative. Uhm. I don't know, uh. Thirty years ago or so then we bought medicines at a price. We sold them at the same price. Yes and and. We just got a rate on it. Uhm, which just covered costs. Mmm. So even the pharmacists,

they still had a, uh, a big villa and a good salary and enough staff. That's about thirty years ago, I think.
Participant 6 [00:10:33] And then she was once said guys, uhm. We're going to adjust that. Uh yes uh. Uh, don't look at the purchase price from us, but uhm. You have to earn 80% or so of our entry price and the other 20% yourself. back then, all those specialties were on the market. So what did the pharmacists do? They're up to mas who are going to call factories. guys I buy so much from you guys. can I get a discount? Fine, If you buy a hundred boxes worth €100 or ƒ100, you will receive a 20% discount on each box. Mmm yes, then you can fill your gap very easily. But we started negotiating so well that there was far too much money left over. And then the government found out about that again. All of these measures have started to impose measures. And then they said that rate no longer covers costs. If you look at the big perspective when you look at it. Actually, it's funny, because the pharmacists have actually made healthcare a lot cheaper, because those drugs are now cheaper. Yes, because I don't think the health insurers found out about it themselves. Yes, maybe, but yes. We are now possible ourselves, but we also need to do business at the same time and much more like a doctor. A doctor must also do that. Well, in a completely different area. We are much more logistical when it comes to purchasing and that is happening. And then the government says, uh, you're too expensive, we're going to give you less money. Go make it cheaper yourself. And then you're going to do it and you'll do it so well and you'll be punished. Then they also want that money Yes, they want that too So that sounds a bit crooked Yes, no, that's so nice.
Participant 6 [00:12:26] But uh, and that was also a time when, uh, aging didn't happen as much as it does today.
Interviewer [00:12:33] Mmm. Yes.
Participant 6 [00:12:35] It's real now, uh. There are far too many old people so healthcare just can't handle it. Can't afford it either. Yes. And that's why everyone is scraping money from everywhere.
Interviewer [00:12:44] We just have to find solutions and that, uh, it's all.
Participant 6 [00:12:50] But yes, losing a patent is fine then huh. Uhm. Mom, now. If he's like that. Like that manufacturer over there.
Interviewer [00:12:57] Yes, for the health care sector, if you lose the patent, it's actually going to make it cheaper. Yes, for one of those things. But of course, it might be a different situation for the pharmacy. It is also a company.
Participant 6 [00:13:09] In itself, I think I'll lose the patent. I don't think that one. In itself, I don't think it's a problem to lose a patent and is also easy to sell.
Interviewer [00:13:18] Yes. Uh well, then we have other questions. There's uh. Let's have a look. Uh, what about the reliability of the deliveries between patents? Product and generic? Uhm.
Participant 6 [00:13:32] Reliability of deliveries is currently uh. Just bad at all?
Interviewer [00:13:37] Yes.
Participant 6 [00:13:39] Uhm. Before the preference policy, almost everything was deliverable and if you had something that was not deliverable once or twice a year and then either a generic or a patent.
Interviewer [00:13:55] How is PCT? Well, you didn't have much there. Problems with No.

Participant 6 [00:14:02] Uhm. Now? However, I often have the idea that the generic ones are not available.
Interviewer [00:14:09] Yes, but it's a bit tricky there. Because yes, of course, much more generic than and also much more that you have to deal with. Yes, I would say specialty.
Participant 6 [00:14:20] And uh, when you have a label, only sandoz are generic. Yes, and it doesn't have acetylsalicylic acid. Isn't that bothering you? Yes or yes, then that does bother you. But if then teva doesn't have acetylsalicylic acid, that won't bother you.
Interviewer [00:14:37] Yes, but there's just another one, another thing, and then because you also have four or five labels now.
Participant 6 [00:14:43] Yes, one is a car stop. Yes, then that bothers you right away.
Interviewer [00:14:48] Yes.
Participant 6 [00:14:50] Yes, that's in itself, uh. I think the reliability of delivering an uh specialty or a generic uh doesn't matter that much.
Interviewer [00:15:02] Yes.
Participant 6 [00:15:03] Because where the supply problems come from is mainly the supply of raw
Until the preferential policy means that the generics now do not know how much they are going to make, it is also very difficult for them to buy raw materials.
Interviewer [00:15:21] Ok, so yes yes.
Participant 6 [00:15:23] You won't buy raw materials if you don't know whether you'll have the market next year or not.
Interviewer [00:15:29] And make your tablets.
Participant 6 [00:15:30] Yes, there is a kind of uncertainty, so yes, that yes, actually your D. There is a chance that it won't work and therefore the profitability is lower than the expected profitability And because, uh, the prices have become so extremely low due to the preferential policy. if a specialty patent expires, it must be generic. Be at least 60% of the price of being a specialty. there are rules for that. The special, uh, the generic shouldn't be as expensive as the specialty, there should be at least that much percent off.
Interviewer [00:16:06] Ok.
Participant 6 [00:16:07] I believe 60% or so. 40% off Do they also give a reason for that?
Interviewer [00:16:13] Because they did not have to incur research costs? They don't have to bring that to the Dutch market at that high price in the Netherlands.
Participant 6 [00:16:22] Yes yes, I would like, if I'm a market, well, yes W Why? After all, it's just a free market, isn't it? If you expire as a patent, you would say yes, why still protect it? Yes, say yes, eventually, the market forces should be me. At some point, I'll end up at that price anyway. Yes, you would say.
Interviewer [00:16:40] Yes, because costs want to reduce.
Participant 6 [00:16:43] Yes. Uhm, they said, but I think 60%. I'm sure you can find it somewhere.
Interviewer [00:16:48] Yes, yes, maybe, maybe, maybe that rule just makes you go to g and get to that result faster. That goes. Yes.
Participant 6 [00:16:55] But they therefore need a uhm specialty. Should market the generic for 60%.
Interviewer [00:17:01] Yes.

Participant 6 [00:17:01] And that's fine, because then you just have four generic ones that provide you with the generic for 60% of the price. But because the health insurers are going to interfere. They say 55% to the target, because then I'll get the whole market. Yes, and they have nothing because I'm the cheapest. But yes, this one thinks yes, I think I'll do A 55, I'll do 54%. So that will be a strategic game. And those prices, they're really falling all the way down.
Interviewer [00:17:27] Mm, now.
Participant 6 [00:17:27] Up to maybe 20%.
Interviewer [00:17:29] Yes.
Participant 6 [00:17:31] That's uh for a total. The Netherlands wants fine, uhm government budget and health insurer budget Prima. But until they say I want to make it for 20% of the price. Yes. Does she have to buy raw materials from China? Yes.
Interviewer [00:17:47] Because in the Netherlands, they can no longer buy those raw materials at that price.
Participant 6 [00:17:51] Yeah no, that, uh, that's not tactical. Well, not for the Europe side either. No, you all have to love. Uh factories are. they also left because no one buys anything in the Netherlands anymore.
Interviewer [00:18:00] Yes.
Participant 6 [00:18:01] Because we don't have to take the environment into account here and I know a lot of things.
Interviewer [00:18:05] Well that's all there. All rules apply, uh, yes, and...
Participant 6 [00:18:08] In China, uh, all the waste becomes like this in the water and the China Sea.
Interviewer [00:18:11] does it have any more consequences that you will then produce in China?
Participant 6 [00:18:14] Yes, well, uh, the uh rules, uh, GNP rules, uh, should apply there too. but they are, uh, a little less well enforced. And the moment there's an inspection on the doorstep and it says I'm closing a factory, well then half of Europe has no medicine. that And then there's that again. Uh, on those or those deliveries, yes. Yes, that's where we'll get by again, by the way.
Interviewer [00:18:40] Uh yes, then there will be that story again.
Participant 6 [00:18:42] Uh yes, that, uh, that Specialite uh factory must also get a raw material from somewhere at some point. So it will eventually end up at those same factories in China. I think there was only one factory left in the whole world, but those who have it sell, right?
Interviewer [00:19:02] They have nothing. Just say they get those for that really low price, they do have that high price. Yes, so you would actually say that they could still stay in Europe.
Participant 6 [00:19:09] Could. If that factory still has enough turnover.
Interviewer [00:19:12] Yes, think that because people think yes yes. But why shouldn't they have that? Yes.
Participant 6 [00:19:19] Yes, uh, because then a specialist also says 100% turnover, am I going to 10% turnover?
Interviewer [00:19:27] Yes, if that's when the patent expires, yes.
Participant 6 [00:19:29] Yes, I'm going to buy at 10% of the raw material price.
Interviewer [00:19:30] Yes, but then what?
Participant 6 [00:19:31] Then that factory says yes, I can't start a production line for that 10%.

No, but then they actually just go out of that market, you would say. That's actually what's happening.
Interviewer [00:19:38] Yes, no, or they will also shop in China.
Participant 6 [00:19:41] Yes, that's possible. Yes, then yes, then it will be yes. But yes, that's a separate thing. But then they're actually, she said PTT again because, say, they have that original. But then they actually just make tablets themselves.
Interviewer [00:19:53] Yes. Yes, I would actually say that they are the same as a generic, but that's uhh again.
Participant 6 [00:19:59] almost, the only thing is that specialite has been branded more often and has done the research.
Interviewer [00:20:05] Yes. Yes, I find it quite difficult to create the brand name. Uh, what, what, what's that? Is that? Oh yeah, that brand name, because I'm sticking to generic, I get that. That's what sandoz aurobindo is behind it. Yes, it was a brand name then. Is that then.
Participant 6 [00:20:18] So then uh uh like a factory that invents uh metroprolol.
Interviewer [00:20:24] Yes.
Participant 6 [00:20:24] And that oh I found a substance called metroprolol but I'm marketing it as a selocene.
Interviewer [00:20:30] Okay.
Participant 6 [00:20:30] So it's now called selocene because they often find metroprolol too difficult. but then the patent expires and then all the other factories that are going to market it under the substance name. So metroprolol.
Interviewer [00:20:42] Yes.
Participant 6 [00:20:43] Kind of like uh duopenoti has duopenoti. So this is not what I call chocolate paste. I call it Duo Penotti. And AH and jumbo they all call it chocolate paste.
Interviewer [00:20:53] Yes, yes. Yes. Yes. Yes. Yes. Ok. K I think that was said. So all of them.
Participant 6 [00:20:59] So tasty then. But okay.
Interviewer [00:21:00] Yes. Ok, well uh, next topic then? Uhm, it may be a bit out or necessary, I think. Uh. You know, uh, if you're going to get a patient for the first time if you're going to get a medicine for the first time? Yes, sometimes, uh, maybe you need an extra explanation because maybe it's a puffer or something. Yes. So do you have certain, uh, partnerships with, uh, pharmaceutical companies? And is there also a difference between the generic and the patented ones? They've got the fire on.
Participant 6 [00:21:28] Yes. Uh. Sometimes yes, sometimes not.
Interviewer [00:21:34] Yes mmm.
Participant 6 [00:21:35] You have uh. you have specialties. That, uh... They are well counterfeit as generic and they look exactly the same.
Interviewer [00:21:48] Specialite looks exactly the same as?
Participant 6 [00:21:52] Generic looks exactly the same as specialite. So then uh, do you have a puffer? And this puffer looks exactly the same, so maybe a slightly different color? And uh.
Interviewer [00:22:00] Yes.
Participant 6 [00:22:00] A slightly different label. But those are just one-on-one. Yes, changeable. But now you also have uh specials that were counterfeited in another device. Yes. then, of course, it's different in shape.

Interviewer [00:22:14] Is it different. Uh, do they have to click differently? Uh, open it differently, yes.
Participant 6 [00:22:19] Just waiting for the click. Don't wait for the nod. Uhm no, that's true.
Interviewer [00:22:25] Yes.
Participant 6 [00:22:25] And for the assistants who need to explain. Oh yeah, how does that device work again?
Interviewer [00:22:30] Yes, that's not convenient.
Participant 6 [00:22:32] A patient who has been clicking for a hundred years. now you think: Hey I'm not hearing a click, that's not going well. Yes or vice versa.
Interviewer [00:22:38] Or uh. Yes, ok.
Participant 6 [00:22:40] So that? I find that difficult, especially with inhalation devices.
Interviewer [00:22:44] Yes.
Participant 6 [00:22:45] Uhm. What they are also still good at with inhalation devices is.
Interviewer [00:22:52] But just uh, that's of course with the one who's always changing. Yes, but do you also have a pantentee, for example? Do you have that even if they say, but before the first issue, you will have that one. you also work with that.
Participant 6 [00:23:05] Uh, that we're working with the factory or something.
Interviewer [00:23:07] Yes, but it's with specialties: When issued for the first time, if it's generic, they just get a generic Yes.
Participant 6 [00:23:14] This is standard because it is then the cheapest. And you can't say I can't stand generic if you haven't tried the specialty.
Interviewer [00:23:23] No, I b I mean more of uh, help the manufacturer bring it to the customer.
Participant 6 [00:23:29] Yes. Um, AstraZeneca, that one or Boehinge? They sometimes want to give refresher courses. Uh for an assistant or for pharmacists. Look, these are our products and that's how they work.
Interviewer [00:23:43] And so AstraZeneca. What was? What's that?
Participant 6 [00:23:45] It's the inhaler factory.
Interviewer [00:23:48] And are they preferential or generic.
Participant 6 [00:23:52] Speciality. And they say oh look so you can give refresher courses sometime and uh in the hope that you will deliver all their products. Yes, but yes, the health insurer has so much in between that.
Interviewer [00:24:04] Yes, but not with the specialty then or uh.
Participant 6 [00:24:06] Not with specialties. Well, the time we went generics, yes.
Interviewer [00:24:07] No, so for specialists, that kind of thing is interesting that you do that kind of thing. Yes.
Participant 6 [00:24:10] And especially for me. For things that are not patented yet, that's fine.
Interviewer [00:24:15] Yes. Yes, that's right. That's sitting. I think more so in that, that research phase. That you're trying to pay off a bit of marketing.
Participant 6 [00:24:22] Wherever they're really good with those inhalers, Uhm, they have an inhaler on the market and by the time the patent expires. they then quickly make a combination preparation of those not yet.
Interviewer [00:24:35] A combination preparation. Yes, uh.

Participant 6 [00:24:37] Two puffs. Yes, and normally you have to puff first and then leave this puff for 2 minutes and you think oh patent is about to expire. Then we put them together and we have a new one. we have a new patent. Are they going to promote that a lot. Yes, it's also really easy for the patient. We came up with a great idea.
Interviewer [00:24:54] Mmm.
Participant 6 [00:24:55] And then you're going to deliver that again. Yes, if those first two years are also patented, they won't be bothered much.
Interviewer [00:25:00] Yes, no, that's another strategy, so that was theirs.
Participant 6 [00:25:05] Yes, but then they kind of take it. Uh, a new one. Well, not right now. How new, say, that she steps, that assistants understand how it works and that new one, yes, they already have it. In itself. Uh, does the assistant also learn that at the course? Yes. Uh. And if there really is something new, it will come anyway.
At some point in Op in the workplace.
Interviewer [00:25:30] Yes, yes. Yes. No. Ok. Uh, I also think but I believe the drug changes are of course more common in the uh that the post-patent market makes because, of course, there are a lot of generics. I believe we've already talked a little bit about it. Yes, but what consequences does that have for the pharmacy?
Participant 6 [00:25:51] Of course, I think it has a lot of influence on profit margins. Yes, discount agreements that you make with the manufacturers.
Interviewer [00:25:58] Mom, now.
Participant 6 [00:26:00] So, of course, that's a bump in your income. uh plus uh changing brands takes more time at the counter. then an assistant is working on it one minute longer per patient. So if you calculate that, it also costs you a lot of money there.
Interviewer [00:26:19] Yes, while the cash profits go to the health insurer.
Participant 6 [00:26:25] Yes. Yes, that's a good point. Uh, all the people who are going to make, uh, mistakes. Yes, because they get different boxes. And that's not only with the specialty to generic, but also generic A to generic B or back to specialty because there is no generic or back again. Uhm, does healthcare itself also cost a lot of money? because they are going to take a double medication, not taking medication with all possible consequences.
Interviewer [00:26:58] But patient care is actually declining then.
Participant 6 [00:27:00] Yes, patient care is really declining. And if you want to repair something, it also takes a lot of effort.
Interviewer [00:27:05] Yes. Yeah, that's what for a dad, do you hear that whole story? And then you're really just working on it for a long time. While in fact, it can just be completely preventable. Yes.
Participant 6 [00:27:16] Yes, it's real. Uh. And especially for old people. People with dementia.
Interviewer [00:27:21] Yes.
Participant 6 [00:27:21] Really ordinary.
Interviewer [00:27:23] Yes, yes, I get it.
Participant 6 [00:27:25] It's that I'm a good read and, uh, I can still read, that box A says the same as box B or it says very small, there's pantoprazole in it and here too.
Interviewer [00:27:33] Yes, uh, we'll get to it.
Participant 6 [00:27:37] When you have everyone everyone. You need to inform very actively. You now have another box.

Interviewer [00:27:43] Yes.
Participant 6 [00:27:44] And then only put an additional 100 people in the positions.
Interviewer [00:27:47] That is indeed impossible, no.
Participant 6 [00:27:48] That's just impossible to do anymore.
Interviewer [00:27:50] No.
Participant 6 [00:27:51] And in the beginning eh. In a previous pharmacy where I worked, we still pasted everything ourselves. So then the one who wrote the recipe. So they add a cross. And everyone pasted, but all of those Orange stickers, watch your same medicines in a different box. Thanks to your health insurer.
Interviewer [00:28:09] Yes, but you'll also be working on that for a long time. Uh, it sounds.
Participant 6 [00:28:11] Yes, but yes, that saves a bit of explanation.
Interviewer [00:28:14] Yes, yes, yes. Trying to make it happen to me that worked. Yes, yes.
Participant 6 [00:28:18] And now you hope that people are a little used to it.
Interviewer [00:28:21] Yes.
Participant 6 [00:28:21] People certainly just come back three to four people a day. Hey Uh, I don't have the right thing.
Interviewer [00:28:28] Yes, or they call Yes, eventually.
Participant 6 [00:28:32] So it mainly takes a lot of time.
Interviewer [00:28:35] Yes, and time is money.
Participant 6 [00:28:36] And uh frustration.
Interviewer [00:28:39] Oh, that too.
Participant 6 [00:28:40] For people, angry people. I didn't get the right thing, it never works out. But before you've actually explained that it's okay. Well, then you've already wasted so much negative energy.
Interviewer [00:28:52] That doesn't work, no.
Participant 6 [00:28:54] A waste of the profession and that's why a lot of people also walk.
Interviewer [00:28:58] Yes.
Participant 6 [00:28:59] Because yes I would have a lot of extra workload, all that negativity that comes with it. You don't want it every day either. being scolded five times.
Interviewer [00:29:05] No.
Participant 6 [00:29:06] If you sit at the Albert Heijn counter, you may only be scolded once.
Interviewer [00:29:09] Yes. OK.
Participant 6 [00:29:12] So a small amount of discounts when a patent expires. but I think that the biggest costs mainly lie in loss of time. Yes, uh, and in uh, patient care that's declining and all the time you have to invest there.
Interviewer [00:29:32] Heavy.
Participant 6 [00:29:34] A bit more of an inventory policy. Because you also need to have something in stock of everything. So you have a lot more spillage.
Interviewer [00:29:38] Yes, uh. Good thing you're coming up with it yourself.
Participant 6 [00:29:42] After all, they are still in.
Interviewer [00:29:45] Yes, yes, spillage, if you like that, uh, there's something in there too.
Participant 6 [00:29:48] If you only have two labels, you can play much better in them. Or 1 label.
Interviewer [00:29:51] Well, or one you need and what you need.

Participant 6 [00:29:54] Got.
Interviewer [00:29:55] Yes.
Participant 6 [00:29:56] And what you buy and how much you can throw in the bin because you don't sell it.
Interviewer [00:30:01] Yes, uh, then. The next topic that I'll talk about quite a bit is the quality of the uh from the uh differences between the quality.
Participant 6 [00:30:10] So, uh, I think the quality of the generic is fine. Yes, they should, uh, do bioequivalence studies anyway.
Interviewer [00:30:18] Yes, so.
Participant 6 [00:30:19] So all of that needs to be demonstrated. And they have to be within the margins of.
Interviewer [00:30:24] Ninety and ninetynine, I believe.
Participant 6 [00:30:26] And a hundred and ten sit. So that's fine for, uh, 99% of people.
Interviewer [00:30:31] Yes.
Participant 6 [00:30:33] From time to time, you just have one that still responds because it says the 90% limit and 110% just says Yes.
Interviewer [00:30:43] Yes, it's just about to reach you.
Participant 6 [00:30:46] But yes, you can still live with that.
Interviewer [00:30:47] Yes.
Participant 6 [00:30:49] No, that's not the problem and you can explain that well. And uh.
Interviewer [00:30:53] Mm, now.
Participant 6 [00:30:54] As long as people try first.
Interviewer [00:30:56] Yes, but not everyone.
Participant 6 [00:31:00] Yes, I think the quality itself is the same. Nor do I have the idea that there are more recalls from a generic than a, uh, yes, from a specialist. On the contrary, I think that recently, there have been more specialty stores than generics.
Interviewer [00:31:18] So why is that or is that just something that happens suddenly? That's just a little bit.
Participant 6 [00:31:22] why shouldn't I know. Perhaps they do even more checks afterwards and it turns out afterwards that something is not going well.
Interviewer [00:31:32] Yes, it could.
Participant 6 [00:31:33] You might take the field more seriously.
Interviewer [00:31:35] Well yes,.
Participant 6 [00:31:36] I'm afraid to say that. No, that's what she is. That's necessary. Then you should always ask the specialists, I think. I think the latest recalls have mostly been specialties. So when it comes to that, Quality.
Interviewer [00:31:50] Yes.
Participant 6 [00:31:51] Yes, I don't see much of a difference now.
Interviewer [00:31:54] Between yes and uh. The quality of dosage forms for patients.
Participant 6 [00:32:03] Uh what do you mean. The how do you mean?
Interviewer [00:32:06] So uh well, we got everything out of the.
Participant 6 [00:32:07] Able to pick up packaging.

Interviewer [00:32:08] Or uh uh yeah no I mean more of sometimes you have uh go they go from one tablet to a completely different tablet. Yes. Or from an uh syringe to a completely different syringe.
Participant 6 [00:32:17] Oh yeah. Uhm, that mainly requires an explanation.
Interviewer [00:32:21] Yes. Yes, but that.
Participant 6 [00:32:22] Devices. Device? .
Interviewer [00:32:24] Uhm yeah, I mean more of is there really quality for the patients in it? Tell me the difference between.
Participant 6 [00:32:30] We have. Uh. Recently I had an example of a patient who came with metrotrexate, which is for rheumatism. So those people want those grown hands and no more power in his hands. Yes, and those old metrotrexate tablets were in big round blisters. And now the new generic of those tiny tablets that I can barely get out of the box. I can't do anything with this. That Yes, I'm not looking forward to them with mine either. Yes, with my hands. Can't I go back to the previous brand?
Interviewer [00:33:08] Yes, that doesn't make sense.
Participant 6 [00:33:10] But then I think yes, think about that too if you're going to imitate something like that.
Interviewer [00:33:16] Yes. Oh yeah, that's also a thing. Not only in bioequivalence, but also that uh.
Participant 6 [00:33:20] That's the patient friendliness of the packaging around it.
Interviewer [00:33:24] Yes. Mmm. Packaging, that's the third. Uh, of course, you also have the fact that there are also differences. what do you think are the differences in that?
Participant 6 [00:33:33] Yes, I think they also do that to reduce costs, of course.
Interviewer [00:33:37] But what does that do for the pharmacy, for example? The differences in packaging.
Participant 6 [00:33:43] Few. A box is a box.
Interviewer [00:33:44] Yes, yes.
Participant 6 [00:33:45] Sometimes you need to make your box a little bigger or smaller.
Interviewer [00:33:49] But yes, uh, of course, that's also in, uh, a patient who suddenly sees the package and when it's new, I understand it's a bit strange.
Participant 6 [00:33:59] Yes but uh. By now, they are used to getting another box.
Interviewer [00:34:05] Yes.
Participant 6 [00:34:06] Uhm. From specialty to generic, it always takes some getting used to. Yes, it takes some getting used to.
Interviewer [00:34:13] Just getting used to it.
Participant 6 [00:34:14] Yes And yes, in itself, as long as it clearly states what it is and what it is. Most of the time, yes.
Interviewer [00:34:24] Yes.
Participant 6 [00:34:25] I can't think of an example where it is. where it's not clear.
Interviewer [00:34:32] No.
Participant 6 [00:34:32] Oh, what a. What is sometimes annoying with packaging is when, uh, she has patented the spiriva with inhalation devices. And it gives 18 milligrams. And that's an inhalation device. And that eighteen mini is based on the content you press the moment uh inhaler goes out.

Interviewer [00:35:00] Ok.
Participant 6 [00:35:00] But the generic called tiotrestien And that ten is based. on the amount that actually ends up in your lungs. and then it gets really confusing.
Interviewer [00:35:13] Yes, I think so.
Participant 6 [00:35:14] While those Eighteen also come out of the device and ten end up in your lungs.
Interviewer [00:35:20] Yes, but you, as a pharmacist, know that too. But who is it confusing for? Is that a patient too?
Participant 6 [00:35:23] Yes, the patient. Oh, that guy actually pays attention to that.
Interviewer [00:35:25] Yes, ok.
Participant 6 [00:35:26] I had eighteen, now I have ten. That's half of it. That really can't be good.
Interviewer [00:35:29] No.
Participant 6 [00:35:30] Taking two puffs?
Interviewer [00:35:31] Yes. Yes. That kind of uh. Yes. Ok.
Participant 6 [00:35:34] And then? Then you will get a replacement. Yes. And that's just how they profile it on the package, uh,?
Interviewer [00:35:41] Yes.
Participant 6 [00:35:43] And I think that's what I think when it just says metroprolol 100 becomes metroprolol 100 or selocene 100 becomes metroprolol 100.
Interviewer [00:35:51] Look, I get what you're saying. I, uh, yes, uh...
Participant 6 [00:35:53] They still understand that one. But that takes extra time and extra explanation and distrust in healthcare.
Interviewer [00:36:00] Yes. Well, ok. Ok. Uh, they have other differences that you see between patents and uh generics.
Participant 6 [00:36:12] Oh.
Interviewer [00:36:17] It doesn't have to be done. It's still there. Maybe another one. That's what we came up with yesterday. Sustainability is still what you think.
Participant 6 [00:36:27] Uh yeah uh think about China.
Interviewer [00:36:30] Yes, ok, yes.
Participant 6 [00:36:33] There is something there. And uhm. I also have in the. Once in a study some fifteen years ago. Electro or Novartis or something looked at. One of those specialty manufacturers, but they have a whole program behind it. Yes, if we do this, we emit so much, so we will plant so many trees in return.
Interviewer [00:37:00] Did they already have that back then?
Participant 6 [00:37:01] Even then.
Interviewer [00:37:02] Oh ok. That's oh uh. So.
Participant 6 [00:37:06] Yes. I think it was electro. I'm not sure anymore. In any case, there was a big company.
Interviewer [00:37:11] Well, I have to say what fifty years ago, I think I was still in high school, and then I think I was in group eight, and then, I think, they were going to, uh, a climate conference. So, in our opinion, something was wrong.
Participant 6 [00:37:22] Yes, that's why.
Interviewer [00:37:23] Not as bad as it is now.

Participant 6 [00:37:26] So I'm pretty sure that all those big companies, uh, have insight into that. Yes, but they also had uhm policies: we make HIV drugs for the western world, but they do make ten uhm dollars more expensive so that we can also bring the same medicine to Africa for free for that $10.
Interviewer [00:37:48] Ok uh uh.
Participant 6 [00:37:51] There is a lot about these specialties. Yes, I also think that they are forced by the governments everywhere to think about it that way.
Interviewer [00:37:59] Mmm.
Participant 6 [00:38:00] Uhm, the generic ones because they are less innovative?
Interviewer [00:38:04] Yes.
Participant 6 [00:38:05] Seems like that more to me. Uhm. Why profit-making companies.
Interviewer [00:38:11] I also notice that I still find it difficult because then you are forced by the government, but they still do it for something. Then you would say yes it's not, I don't think they're so popular with yes uh yes D Why do you do that?
Participant 6 [00:38:23] Yes, highly polluting industry Hey.
Interviewer [00:38:25] Yes, yes.
Participant 6 [00:38:25] It's, uh... So that's another story.
Interviewer [00:38:30] But you keep people alive, that's also very polluting, huh. That's the worst thing you do.
Participant 6 [00:38:34] Very bad for pensions. And uh.
Interviewer [00:38:38] Yes, absolutely.
Participant 6 [00:38:40] Then I don't have to do my job so well anymore, that makes a difference.
Uhm. Yes, I have the idea that they are really not working on that among the large companies anymore.
Interviewer [00:38:51] Yes.
Participant 6 [00:38:52] But that's more of an emotional issue.
Interviewer [00:38:54] Yes. Well, if you did the research, then.
Participant 6 [00:38:57] Yes, I know they did it, but I don't know if those generic ones do it. Or what they do about it.
Interviewer [00:39:03] Yes, sometimes they do and then you have no idea what could be the case, of course. So that's what. But yeah, it's also another thing about how they communicate that to you guys, uh... If there is no communication, yes, that is difficult, uh.
Participant 6[00:39:16] In any case, little has been communicated about this. Well, I know. Coincidentally, because I then, uh, researched that.

Participant 7

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Interviewer[00:00:02] Ok. Uhm can you. Can you give your verbal consent again before recording?
Participant 7 [00:00:10] What should I do?
Interviewer [00:00:11] Give your verbal concert before recording.
Participant 7 [00:00:14] Yes, yes, I did. Yes.
Interviewer [00:00:16] Ok, thank you. What kind of changes do you think will happen if the pharmacy loses its patent like a medicine? What are the most important aspects here?

Participant 7 [00:00:26] If you lose your patent. Uhm, look, at the moment, it's actually the case that it's uh generic. That is also ready to enter the market, especially if the uh medium has a bit of volume. Uh, then the drug is ready to be released and a few days later, an uh uh, one of the drugs is preferred. Yes, you can't do much anymore, but a lot has changed. Previously, you could then see for yourself which brand you were going to take from. Which brand is generic because there were immediately several providers. But uh, that's actually, uh, much less.
Interviewer [00:01:01] Yes.
Participant 7 [00:01:02] So in itself, it doesn't change much that, uh, uh, yes, it changes a lot because then the brand goes out and it has to be Generic yes, only the insurer decides which brand it is.
Interviewer [00:01:15] Yes, it's up to you to change nothing at all.
Participant 7 [00:01:18] What you really should watch out for is that you don't have too much of the brand lying around, because you will not know or you don't know if its patent expires, maybe a suspicion, but often you don't even know that and then it's suddenly out of patent. And if you have a drawer full of branded medicine, you will never get rid of it in your life.
Interviewer [00:01:36] But why don't you know that? Is that because they then have so many different ones.
Participant 7 [00:01:40] There's no one going to call you? There's someone next week, uh, something that goes out of patent, but that's not allowed either.
Interviewer [00:01:45] Isn't that allowed either?
Participant 7 [00:01:46] Not even allowed, because uh, the generic manufacturer is not allowed to take economic actions before the patent expires.
Interviewer [00:01:54] Yes. Yes.
Participant 7 [00:02:00] You can't say that's going to be out of patent in six months.
Interviewer [00:02:02] Yes, but you won't know the brand's uh either. So you get whoever has a patent there.
Participant 7 [00:02:08] Of course not, that one would be crazy.
Interviewer [00:02:10] Yes, ok, this is also not logical, no.
Participant 7 [00:02:13] So actually. Formally, you should only receive the first message when it becomes unpatented. The drug is out of patent.
Interviewer [00:02:21] Yes.
Participant 7 [00:02:22] The only way is if you're in t uh uh the one way, but you do, no one actually does that either. Is that your Uh d'r is in a so-called tax the z-index and it is possible that a drug is already there. Uhm uh, you get registered with the tax because, for example, it says that t uhm uh, the patent expires in the middle of the month, uh, huh? then you have to register him for that tax one month in advance anyway.
Interviewer [00:02:53] And then you can see it.
Participant 7 [00:02:54] Then it states that it would expire in mid-May, the patent on May 15. Yes, then that manufacturer who registered that drug with, uh, the tax sometime in April, and by the end of May, that thing is already in the tax. only that's what you can do. You are therefore not allowed to connect it. You're not allowed to go with anything yet but you can see it.
Interviewer [00:03:13] Yes.
Participant 7 [00:03:14] And so then you know about him.

Interviewer [00:03:16] Yes, it's still possible.
Participant 7 [00:03:17] so you'll have to actively search yourself.
Interviewer [00:03:18] Yes, that's fine. Yeah, you don't have a lot of people there either. But I also think it's about the turnover rate of the products in how far you can lose if you already know that it's going to expire, right?
Participant 7 [00:03:35] Yes, but that's what I'm saying. So the problem is when you have too much in stock, that uh uh, then we'll have a hard time getting rid of them afterwards.
Interviewer [00:03:45] yes, well, then you need a bit of medical necessity just because you and then you could get there. But yes, there he is. Oh uh, I also follow a lot of rules and that's all very difficult. Yes.
Participant 7 [00:03:57] So difficult and then you can't get rid of it and then you can get a price reduction from the brand there and that's what they do, so that costs money too.
Interviewer [00:04:05] Yes, then you will lose at yes. Yes, ok. Uh, what can you say about the differences in monetary values between the post-patent market and, before that, for pharmacies.
Participant 7 [00:04:18] What is the value?
Interviewer [00:04:19] Monetary. So what, say, how much do you earn on the products.
Participant 7 [00:04:23] That's what it was. Look, before, the generic was a lot of really interesting stuff. But not really anymore with a preferential policy these days. So it's a uh uh t is it's actually uh uh. It almost gets annoying that some of that thing becomes generic because you have an uh uh you at a. If there is only one remedy, that price is fixed. And pay the insurer price too. Maybe with a small turn, because that price is fixed when a generic arrives. Then the insurer decides which product you should deliver. Yes, but if that product is not available, we say, we will reimburse the lowest price and if you also want that lowest price, you may not be available and you will have to deliver something else. But then you will be reimbursed for the lowest price. And that lowest price is therefore a loss.
Interviewer [00:05:15] Ah yes, you have that there too. You have that extra in all of that. Yes, yes.
Participant 7 [00:05:21] So it's more and more the case with generic because, uh, there's actually almost no free choice anymore and that's only going to be worse next year, then it's just a uh, a small insurer with an uh three 4% market share that doesn't, uh, prefer, uh, and everyone else does.
Interviewer [00:05:41] Yes, I heard it was even more about which one went. Well, one really went with the double that went up by how much preference I think. My dad showed that or what? Yes.
Participant 7 [00:05:53] They all really go. Yes, there is no stopping that.
Interviewer [00:06:01] Ok. Uhm. oh wait, I wanted to talk about that too. You just said that. You therefore have to do a lot of searching as a pharmacist. At least, that's how far it sounds even when the preferred one isn't there. Then you have to go to the next remedy. so that doesn't make sense as a pharmacist either and therefore wastes all that time.
Participant 7 [00:06:21] Yes, that's right.
Interviewer [00:06:22] None of that makes sense either.

Participant 7 [00:06:24] You always come to terms with it. Because in, and that's also the worst part, you always get in trouble. Because the insurer covers itself in such a way that it at least does not pay for it.
Interviewer [00:06:31] Mmm. Uh uh. Are there any differences in the discounts or favourable agreements that arise between the generics and the patent products. So you can still make appointments with generics.
Participant 7 [00:06:45] Yes, but that's almost pointless, because you can only make an deal for the so-called free space. So for an insurer where there is no preference. But because that is now gradually disappearing everywhere.
Interviewer [00:06:58] Yes.
Participant 7 [00:06:59] There is no free space left. But so there is no more trading either. And so you get And and and. What you get as a result is that actually, uh, everything is stuck. And, uh, then? If that manufacturer is no longer able to deliver at some point, there is no other manufacturer left. Yes, that's the d. It was all in advance. And whoever was then available for that free space is also quits because there is no free space anymore.
Interviewer [00:07:22] Well, by the way, this is the next question: the reliability of the deliveries between patents and generics. Yes, yes D. Yes, that's all you're talking about. You're already going, you're going back considerably there.
Participant 7 [00:07:34] Uh dramatic.
Interviewer [00:07:37] Dramatic yes.
Participant 7 [00:07:38] Yes.
Interviewer [00:07:39] Well so. But now you're really thinking that's the thing, uhm. Say, that means switching over. That it may be due to a real preferential policy. So if we.
Participant 7 [00:07:49] To prevention, that's all, that's not that hard to come up with at all because you're the uh, what's that called? It is often the case that all major insurers choose the same manufacturer as their preferred drug, so then the one is a supplier and it has an uh that has uh one. With the major insurers, you have about 90% market share. he then knows how to deliver something for the coming year for at least ninety in 90% of the cases. The other 10% is actually no longer interesting.
Interviewer [00:08:20] Yes.
Participant 7 [00:08:21] For a manufacturer to keep the product on the market for that purpose. Because you still have to pay a registration fee, right? You just have to do all kinds of things. Uh yes, you have to keep the product in stock, but no one buys it.
Interviewer [00:08:32] No.
Participant 7 [00:08:32] Alone. You're just waiting for the other one to stop delivering 90% to that manufacturer.
Interviewer [00:08:39] Yes.
Participant 7 [00:08:40] And when it is no longer able to deliver, you also have far too little what you have. Not 90%.
Interviewer [00:08:44] No.
Participant 7 [00:08:46] Then lie down. So it's always that that always goes wrong. Because you're actually uhm artificially creating an uh uh uh you're actually creating a monopoly.
Interviewer [00:08:55] Yes yes, absolutely. But that's also because they all choose for themselves, wouldn't I say?

Participant 7 [00:09:00] Yes, and if they choose other ones, they would be better. True, so we would have the same one more often t uh de now also stops at mid-forty or so that uh where exactly the same manufacturer uh uh is indicated. Yes, and that, uh, is asking for trouble.
Interviewer [00:09:14] Yes, but I do believe that forty is like they have the same thing, and most of them are one or two, so it doesn't work either.
Participant 7 [00:09:22] Actually, don't hurry if or if the there should be any freedom, freedom of action, you'll get dynamic and then you'll have, uh, there will be a fight.
Interviewer [00:09:31] yes, then you have market forces.
Participant 7 [00:09:32] Yes, and now nothing is being done.
Interviewer [00:09:34] Now it's going to be no but yeah, yeah or I'll start at uh. But it's done so quickly. Yes then yes. Yes, well ok. Uhm, this one might be a bit trickier. I'm just going to explain something. Are there partnerships with patents, products or generic products in making it easier to bring products to customers? So let's say you have an uh one with me, a patient has a new drug and there's a partnership with uh Aurobindo. I'm just mentioning something like that medicine so that the customer can use it more easily.
Participant 7 [00:10:09] Yes, that's possible. Yes, that's possible, that's right, that's for that free space again? That you're making an appointment with an uh manufacturer, actually. This is possible for free space, so if it is not the preferred package of the other one.
Interviewer [00:10:20] Yes, so let's just say with things you prefer. They're not going to be me, say, uh.
Participant 7 [00:10:25] No, that's not possible.
Interviewer [00:10:26] But that's not possible, yes.
Participant 7 [00:10:29] Look preferred, you must deliver that and, if preferred, the manufacturer has agreed with the insurer. So that's that, is that. That really makes that so difficult because the preferred drug, for example, can be in the tax for €5. Yes, and another drug that stands for one euro in the tax. Then you think of choosing by means of €1. But that is not the case. Then they opt for a €5 remedy because after that, the manufacturer already has €4 under the table to the insurer.
Interviewer [00:10:57] Yes.
Participant 7 [00:10:59] But that also makes it difficult. Yes, it's just that that's not clear. Not transparent to us either.
Interviewer [00:11:04] No.
Participant 7 [00:11:05] No. And yes.
Interviewer [00:11:07] OK.
Participant 7 [00:11:08] That's hard to explain.
Interviewer [00:11:09] Yes. Yes, that's difficult, yes. Uh, I did. This is a study involving drug changes. So uh, no, uh, the insurer chooses from one generic A to another, about those things happen more in the post-patent market, of course. What effect does that have for the pharmacy?
Participant 7 [00:11:27] Yes, it has many consequences, of course. That's again, uh uh, what's that called explaining again? Fighting with people.
Interviewer [00:11:35] Yes.
Participant 7 [00:11:36] Yes, that's true. That's okay.
Interviewer [00:11:40] Also.

Participant 7 [00:11:40] Because. Because. Because you're being forced into a certain angle, isn't it?
Interviewer [00:11:44] Yes. Yes. You. You can't. You can't tell the customer this is a better choice. No, you just have to. Yes, the insurance chose it.
Participant 7 [00:11:54] Yes.
Interviewer [00:11:55] Yes. And we need to explain it to you? Uh, what are the differences in the use of drugs in the post-patent market? So, for example, is the quality of medicines different?
Participant 7 [00:12:08] no.
Interviewer [00:12:08] No difference.
Participant 7 [00:12:09] But that's also good. We have a. Good, that's no different, because all resources become natural, but they are registered. So that means you do have to meet certain requirements. You must, no, provide test results. So note that just means that you have that tablet that just meets the requirements you can set for a tablet.
Interviewer [00:12:28] Yes, it must be bioequivalent and but I believe that is.
Participant 7 [00:12:29] yes must be bioequivalent. Should well actually do that one on time for stability uh you have to do all kinds of studies there. It's politically registered so it's not like, uh, uh, the one, it's not real. It's not a mess, really.
Interviewer [00:12:43] No no. Uhm and the quality of the forms of administration, there is still a difference between them. .
Participant 7 [00:12:51] No.
Interviewer [00:12:53] No?
Participant 7 [00:12:53] Yes, quality, yes. You know, there are the certain drugs with devices that uh uh that's lung medication or something and there. That can be annoying for people.
Interviewer [00:13:05] Yes, yes.
Participant 7 [00:13:07] So it's possible that you determined that you have a certain device and that it's uh. Uh that the insurer wants you to go to another device. With the same fabric but a different device. And that is difficult.
Interviewer [00:13:19] Yes, that's D, that's difficult with that transition, I think.
Participant 7 [00:13:23] Yes, but that's really possible. Uh D that can be really annoying. Well, because the de de have a uh, the device does what h too. You know So the one in that can add something.
Interviewer [00:13:34] Yes. Anyway, I, uh, yes, I've also heard from other people that they have different strengths or something, but then they do the same thing.
Participant 7 [00:13:43] Yes.
Interviewer [00:13:44] What that means is on from the outset. This is how much you inhale, like yes, I know all those, I don't know exactly all those grams, but one is how much you inhale and the other is how much you get into your lungs or something?
Participant 7 [00:13:53] Yes, that is also possible.
Interviewer [00:13:54] Yes. So that's very vague for people.
Participant 7 [00:13:58] Tricky, yes.
Interviewer [00:13:58] you have to explain to me, but I think that's more packaging. That's what it says, well. Well uh is anything else you'd like to add that hasn't been discussed yet? No. No. Ok then, uh, we're done.

Participant 7[00:14:14] Oh, nice.

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Participant 8

Interviewer [00:00:00] Ok. Could you give uh your verbal consent again before the uh before recording?
Participant 8 [00:00:04] Yes, I agree.
Interviewer [00:00:06] Thank you Uh, well, please introduce yourself first.
Participant 8 [00:00:10] Yes, I'm ---, I'm a pharmacist from uh ---, which is an outpatient pharmacy. I've been working here as a pharmacist for, uh, 26 years.
Interviewer [00:00:20] All in an outpatient setting?
Participant 8 [00:00:21] That you first uh public, uh, because a long time ago, there was no outpatient pharmacy. And uh, for the last ten years, I've been sitting here now.
Interviewer [00:00:34] ok ok uh well uh what kind of changes do you think happen when one, for the for the pharmacy especially, when a product loses its uh patent.
Participant 8 [00:00:45] Yes, those are, uh, twofold. Uh it has uh opportunities and threats.
Interviewer [00:00:52] Yes.
Participant 8 [00:00:53] Uhm, earlier there were a number of expensive medicines. You have a chance that you can get an incredibly large margin for a certain period of time.
Interviewer [00:01:01] Yes, with earlier you mean before the preference policy.
Participant 8 [00:01:03] For the preference policy. Uhm, some funds are not always included in a preference policy either. Uh, but of course, you also have the threat that, especially if it's a uh somewhat cheaper product, it will immediately become preferred. And then yes, maybe you still had a discount on the original, so you won't have any discounts at all after that.
Interviewer [00:01:23] Yes, it's mostly those cheap products. well, what was that second part then.
Participant 8 [00:01:37] Yes, you're so uh uh uh and losing that margin. Hey, maybe you have something like your original and then you have no margin for the generic version.
Interviewer [00:01:49] Yes. so you're actually losing your profit margin as a pharmacy. Yes, ok, yes, that's also the second question. That it. Yeah, the differences between the mo the differences in pharmacy amounts between that patent market and before. Well, they immediately lose money with it. But it's mainly on the cheap products anyway.
Participant 8 [00:02:10] Especially on cheap products. You have that with the more expensive products too, and then you often see that, uh it's not a lot of generics. Have you had for example…
Interviewer [00:02:21] But what is the reason for that?
Participant 8 [00:02:23] I'm thinking about the production process, because then I think, for example, biosimilars that are a bit harder, uh, to make. You usually only have one manufacturer who offers it first. And then, in my opinion, it can’t become a preferential product right away.
Interviewer [00:02:36] Uh yes.
Participant 8 [00:02:38] Only when there are several generic variants. and with those biosimilars, you also have that it's never exactly the same, a bit of a grey area.
Interviewer [00:02:49] Yes, it's also 90 to 110% that it should be somewhere in between.
Participant 8 [00:02:54] Uhm, so you can still uh profit on that.
Interviewer [00:02:59] Yes.

Participant 8 [00:03:00] But that it we all know that that time is quite short.
Interviewer [00:03:05] Yes, and that at least those expensive products go a long way in producing that product, so that's why they stay expensive. Yes yes yes. Uh, is there also a difference between the agreements you make? Say discounts with uh generic companies and with patent companies, for example.
Participant 8 [00:03:22] Yes. Well, in itself, you usually deal with an uh uh patent company. And an agreement, so to speak just so much percent discount. Uh. Sometimes it's a monopolist and then they don't give away a discount at all. But then you are happy again when it becomes generic. Yes, and when it comes to generic, it's actually more that you agree on a uh discount for the package. you have a preferred supplier. If they have something new then that's within your overall purchasing margin.
Interviewer [00:03:54] But do you close it or the insurance company? or yeah, if it is not preferred.
Participant 8 [00:04:00] If it is not preferred, we will close it and if it is preferred, then yeah.
Interviewer [00:04:04] Yes, yes, ok. Yes, that's clear then. Uh, let's see. What about the reliability of the deliveries between the patented products and the generics?
Participant 8 [00:04:16] Yes, that's it's uh, that's actually something from the last two or three years. Look before When a generic product came along, we actually had no problem with, uh, that it wasn't available or unavailable. And now it's actually, it doesn't matter if it's original or uh generic, uh, sometimes both can't be available so that just the raw material isn't there.
Interviewer [00:04:41] Yes.
Participant 8 [00:04:42] Uhm, and I do have the idea that the arrival of the generics, actually so many generics, has increased, say, delivery problems.
Interviewer [00:04:54] Uhm. I need to explain this one a bit. Uh, if a patient, say, goes to the pharmacy and goes to a new product, a new medicine, does they she also get certain partnerships that you enter into with certain, uh, generic or patent companies so that it's easier to deliver, say, for that customer?
Participant 8 [00:05:15] Few.
Interviewer [00:05:16] Few.
Participant 8 [00:05:16] Few.
Participant 8 [00:05:17] at the beginning, uh, you still had some generic conversions if that uh, say, those uh patients were given leaflets uh a very nice booklet so you could explain that.
Participant 8 [00:05:30] But actually that's so standard now that…
Interviewer [00:05:33] Mmm. So standard uh was that standard?
Participant 8 [00:05:36] Well, maybe not entirely for the patient, but it happens so often now that you go from one generic to another or just go back to the original and then back to the generic. This is because, under the preference policy, it is adjusted every other year or maybe once every two years.
Interviewer [00:05:53] Yes, uh, that.
Participant 8 [00:05:55] In that regard it’s really a forest he.
Interviewer [00:05:57] Uh yes, uh, well, then we can go straight into it because that's the next thing that I. it’s already been investigated there are many more. There have to be more drug changes that need to take place in the post-patent market, because yeah, you have one

product before that. So that's not going to change much. but then it changes because of the insurance company. What consequences does that have for the pharmacy?
Participant 8 [00:06:18] Well, uh uh, what the consequences have uh and what's actually pretty uh weird, is it from the pharmacy, or at least. You now have a drug, say a drug and a strength, we have different labels lying around.
Interviewer [00:06:36] Yes.
Participant 8 [00:06:37] That is, uh, not efficient and certainly not. Look, we are an uh outpatient pharmacy, so those people who come, they need to have their drugs with them right away and go back again. And they're not coming back to us, whether it's clear or a little bit.
Interviewer Yes, hopefully they won't come back huh.
Participant 8 [00:06:55] Yes, hopefully they won't come back, but they won't come back to pick up the remainder, for example. Otherwise the need is that we have, say, 5 types of a drug immediately, so it's actually almost no good drug uh management to carry out.
Interviewer [00:07:11] Yes.
Participant 8 [00:07:13] I now know that in a distant past, I once had an excursion to Germany, to a German pharmacist, And we looked into that cabinet and we were laughing 'van aah' they have five different brands of metroprolol. Now we have that too.
Interviewer [00:07:31] How long ago was that?
Participant 8 [00:07:31] Twenty Years Ago.
Interviewer [00:07:34] And now we have that too, yes, uh, and for for operationality? Well, you've said that already.
Participant 8 [00:07:42] It's also, you're supported by t uh by the AIS, but it's yes, it's just difficult hey because you just have that patient of yours, who you want to give something. So then you will basically deliver the preferences first. Well then.
Interviewer [00:07:56] Yes.
Participant 8 if you don't have It, well, you're going to give something else because your patient.
Interviewer [00:08:00] Yes, I think there are all kinds of certain rules for that. Yes, yes. And if you don't do that properly than…
Participant 8 [00:08:06] Yes, you will be cut on that again. Yes, and then you have the delivery problem again, even though uh you want the good one but it's not available. So it's uh for that matter, it does make things really complicated.
Interviewer [00:08:20] Yes, different than it should be, isn't it?
Participant 8 [00:08:25] Yes, that's a shame.
Interviewer [00:08:26] Yes, yes. Uhm, what differences are there in the post-patent market in the use of drugs? Think about quality, for example. Is there a difference between them?
Participant 8 [00:08:36] Well, I don't think so, but of course there have been a few mistakes in the past. Hey uh mostly with factories in uh India where something uh was uh kept or from Korea. Yes, not entirely sufficient. Once upon a time, be FDE approved and then uh over time.
Interviewer [00:08:58] Yes.
Participant 8 [00:08:59] Approval has been revoked.
Interviewer [00:09:00] But yes, that uh, I've already heard something about that in previous interviews. That uh because it all been going there, because of course the rest is in Europe. The

the patent products are mainly located here and then they go to India, which is of course cheaper. Yes, but you have less, uh, standard on that, at least. Yes.
Participant 8 [00:09:17] Well, in principle, that standard is there. Only the employees, of course, are not there. They don't have a work ethic like here. Of course, they have a very different relationship with their employer than what they have here in Europe. Look when they say there in India, we're all only putting half of it in. Then such an employee thinks yes, it's all nice, but uh, I'll just do it. If that happens here in Europe, uh, I hope a number of people will say yes, that's not possible.
Interviewer [00:09:46] Yes, that's not possible.
Participant 8 [00:09:47] You can't do that but in India, your head goes off and here, uh uh, it's normal to report that.
Interviewer [00:09:53] Yes.
Participant 8 [00:09:54] Yes. And of course that has all kinds of uh it sneaks into how you yeah, how reliable such a quality audit of such a factory is.
Interviewer [00:10:03] Yes, uh, uh... And the quality of the dosage forms. So there is also, say, a certain difference. In the quality that they provide? Yeah. I mainly hear a lot about people discussing, about the inhalers and the…
Participant 8 [00:10:23] yes, I was thinking about that too Yes, it includes a number of generic variants that are indeed very very bad.
Interviewer [00:10:29] Mmm. Well. What do you think causes that they so, so.
Participant 8 [00:10:34] Cheap, as cheap as possible. if you look at what a box of Simsvastine costs. That is €0.50/0.40. Well yes.
Interviewer [00:10:43] Yes.
Participant 8 [00:10:44] You can't really imagine being able to print the leaflet for that, so that.
Interviewer [00:10:50] Yes, certainly true.
Participant 8 [00:10:50] And then, of course, you also have those devices, yes. After all, it is a production system.
Interviewer [00:10:56] Yes, I know that, if you have a 40-cent box. And then you do everything you have to do for it. The fact that it's forty cents is actually amazing.
Participant 8 [00:11:01] Yes, and that we also need to FDE again to prevent counterfeiting with the €0.40.
Interviewer [00:11:08] Yes, then you also have to handle it all properly with your supplies and stuff. I think it's nonsense. Uh, well, here's what I've already heard about the differences in packaging. Do you still think there is an uh difference?
Participant 8 [00:11:24] Yes, there are, uh, what do you call that from people who are for 28 and people who are for thirty. They have always grown up with monthly packaging is thirty pieces. uhm, there is something to be said for that in itself. On the other hand, the 28 pieces for four weeks is also worth mentioning. but you can see that, say, the generics have thirty, sixty or ninety dosages and the original ones have more than 28 and 56 dosages.
Interviewer [00:11:58] Yes. Yes, I know a little bit what you mean, yes. Yes. Uhm. Oh yes, and I had also heard something about someone else. I always ask the question and then I usually get something like fuck yeah. Yes, this is still a nice story but they usually think there isn't much difference. You know what we started about that, so to speak. It is very unclear for. In the case of certain packages with your Sandoz somewhere in the corner the color is slightly different. So

if you have, say, two different medications. And, uh, sure, it gets up. But yes, when it's dark, so it's hard to see. Yes, otherwise, that color is slightly different, but you can't see that anyway. And of course it is on there. Yes. Yes. Uhm, is there anything else you'd like to add that hasn't been discussed? About between the differences?

Participant 8 [00:12:48] Well, with those boxes, if you have one label, you have the chance that you will indeed get these kinds of things. Yes, all those drugs look alike. The only advantage of a regular preference policy is that you have different types of labels. Yeah, well, maybe that's the only positive thing about it, but uh.

Interviewer [00:13:08] Yes, yes. And that it is cheaper for healthcare, say not for you, but for health care.

Participant 8 [00:13:14] it worked for the Netherlands.

Interviewer [00:13:16] Yes, yes, that.

Participant 8 [00:13:17] It also got through to the VWS, because they also know that it's actually a bad system and not patient friendly. But I think, well, it works.

Interviewer [00:13:25] Yes.

Participant 8 [00:13:26] Because that actually is, it has brought the drugs or down enormously.

Interviewer [00:13:31] By the way, I'm just stopping the recording because we're done with it. Of course, it all has to be in the transcript.

Participant 9

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Interviewer[00:00:01] Can you give your verbal consent again before the Recording?

Participant 9 [00:00:05] Yes. Agree.

Interviewer [00:00:07] Ok. What kind of changes do you think will happen to the pharmacy if a medicine loses its patent? Please mention the most important aspects.

Participant 9 [00:00:17] The most important aspects of when a drug loses its patent.

Interviewer [00:00:21] Yes.

Participant 9 [00:00:23] Then the entire generic market crashes. All manufacturers are going to launch their own version of the medicine, which they can do much cheaper than the original maker.

Interviewer [00:00:33] Yes.

Participant 9 [00:00:34] Uhm, so yes. What's happening is much cheaper variants coming on the market that, uh, I think, uh, take over 98% of the market. Uhm that is.

Interviewer [00:00:49] And uh what does that do. What does that do for the pharmacy?

Participant 9 [00:00:56] Yes, you have a little bit of two sides, a little bit of the financial side of you. You'll spend less for a specialty medicine. So instead of fifty or €100 per box each box, you go to a few euros per box. So I don't think it's an, uh, an advantage in terms of financial resources. Uhm I think it's for the patient in terms of care that's it. Mmm yeah I don't know that? That's a bit mediocre though. You have, uh, the patient who's used to that special medicine. Patient use Don't you always understand that a generic medicine has the same active ingredient?

Interviewer [00:01:36] Yes, but maybe that's more that change then. And it's not necessarily about the difference in quality. Because if you're going to look at a patient who, uh, gives a specialty for the first time and gives it a number seven, for example, and then you also have a

patient who gets one and one generic medicine for the first time. They're also going to give maybe seven, but yes.
Participant 9 [00:01:57] Exactly, it's more because they're used to that first drug and if they don't experience any side effects, go to the generic and suddenly feel a little different. Then they immediately think oh that's because of that switch. But there are so many other factors that also play a role. Uhm yes, for instance. In fact, when I look at where I work myself, you all have people with oncological diseases. Yes, it may well be that the side effects they subsequently have on that generic drug are simply due to progression and not because of the switch in the medicine at all. Well, they can, it's really hard to separate that from each other.
Interviewer [00:02:35] Mm, now.
Participant 9 [00:02:36] So in terms of patient care. I think that. Well, I think patients need to be well informed and therefore deliver before the pharmacy. The switch from the one that the drug goes out of patent does require some effort. Uhm, but for the Netherlands, for example, the healthcare money, it's only good if a drug goes out of patent.
Interviewer [00:02:57] Yes, but, for example, a very good yes, uh, what can you say about differences in monetary values between the post-patent market and before, mainly aimed at pharmacies?
Participant 9 [00:03:08] Sorry, can you say that again?
Interviewer [00:03:08] So the differences in monetary values are money. Yes.
Participant 9 [00:03:14] Mmm. Yeah t t uh the price just goes down ten times. This or more. So uh d d do you mean that if in specialty products that are just those are just a lot more expensive?
Interviewer [00:03:28] Yes, but you also get less compensation and, of course, you also need an uh what's actually involved.
Participant 9 [00:03:38] Yes, but there are a bit of two sides to it. Idd the fee rule. I think that's where you make the most profit. It remains the same, of course. Uhm. Yes, you won't make a lot of profit on the product itself unless you work in a hospital. Some hospitals have expensive medicines, are they still able to purchase prices? Uh uh yes, get a purchase discount on certain expensive medicines and that the health insurer simply pays the full pot and that is of course better off on large amounts, so for that matter.
Interviewer [00:04:11] Yes, this is mainly with medicines that are not, say, preferred.
Participant 9 [00:04:22] Uhm yes, well, like a cure. If there isn't one yet, uh.
Interviewer [00:04:25] Uh yes yes.
Participant 9 [00:04:26] Maybe. Now that it's out of patent, it's uh preferred anyway.
Interviewer [00:04:30] Not necessarily?
Participant 9 [00:04:32] as a medicine when no generics are still on the market, then the drug is preferred anyway.
Interviewer [00:04:40] Yes, ok.
Participant 9 [00:04:40] Yes, then it's the only cure there is.
Interviewer [00:04:42] Yes, then it's the only cure there is. Yes yes yes. No, but that. I don't believe you're talking about it anymore. I think that's what you call specialty. Well, you have, you also have, so to speak. You have, uh, drugs that are then out of patent, but are not designated as preferential. And at least you can do that, that's question 3. You could still agree

on discounts on that. And that's what you just kept as a story with the hospitals. Those products are usually still in there. so yes in that free space.
Participant 9 [00:05:18] Yes, you can call it that. But yes, exactly.
Interviewer [00:05:21] Uhm, what about the reliability of deliveries between patents, products and generics?
Participant 9 [00:05:29] Well, in general, there are not many delivery problems with the specialties, but that is also possible. Yes. Well I guess. I think they make sure they can deliver enough because they have to earn back the money for all the studies. And when you then look at the generic market, you have an awful lot of delivery problems. Yes, but yes, they also have to, they have to make it for much less money. And that in itself is also possible. But they, they just fixate on the products that they can make the most profit with, and sometimes at the expense of, uh, the other products. That is difficult though. However, we often have, uh, drug shortages when they become, uh, generics.
Interviewer [00:06:14] Yes.
Participant 9 [00:06:15] Last November, we had a drug that went out of patent and, uh, then we signed a contract for, uh, two years. And in November, it turned out that they just didn't, uh, that they couldn't meet our requirement.
Interviewer [00:06:28] So that was when was the generic drug?
Participant 9 [00:06:30] Well that was.
Interviewer [00:06:31] Preferred.
Participant 9 [00:06:33] Uhm yeah well, it's an oncological drug. Wasn't really a preference, just an add-on medication. yes is abiraterone.
Interviewer [00:06:45] Ah, ok.
Participant 9 [00:06:46] But yes, then, in January, we had to switch to another generic uh generic brand that could meet the demand. so yeah those are uh.
Interviewer [00:06:54] Yes, then you're actually saying that it's not even necessarily about preference, but also really about them becoming generic.
Participant 9 [00:07:02] Yes. H Yes. Yes, that preference that one. That is of course slightly different for the add-on medication.
Interviewer [00:07:09] Yes yes uh uh d. I must say that I had never heard this before.
Participant 9 [00:07:16] Okay, yeah, that's what I'm mainly dealing with, so that's.
Interviewer [00:07:18] Yes, but that's good, that's good. I'm just going to tell you a story because it's usually unclear. So, uh, suppose the patient comes to you and gets medication for the first time. And then maybe there's some kind of partnership with a certain patented company or a generic company to say that medicine so that the customer can easily use the medicine. Do such partnerships exist?
Participant 9 [00:07:55] one more time.
Interviewer [00:07:58] Uh yes, so you have a drug and the customer first used that medicine and then you have a certain type of partnership with a generic company or a patented company, say that medicine to make it easier for the customer to use the medicine.
Participant 9 [00:08:16] Like making it easier to sell or something.
Interviewer [00:08:19] No no That they understand, understand how to use it. Oh yes, so that it will be more user-friendly.

Participant 9 [00:08:24] eh, uh, well. with tablets and such, you don't really have that because tablets are very straightforward. But you have it with, uh, inhalation medication, for example. When a new inhaler is being launched and then you get an email or a letter, do you also want some, uh, some trial inhalers? And you can then use it to explain at the counter how that inhaler works. Do you know that's how how you are.
Interviewer [00:08:52] And with which companies is that or is there no real difference.
Participant 9 [00:08:56] That's where it is. those are really the manufacturers of the medicines.
Interviewer [00:08:59] Well uh well, which manufacturers are of course two types.
Participant 9 [00:09:02] Yes, that.
Interviewer [00:09:05] Yes. If you can't say those when you can't say that, you can't say so, uh.
Participant 9 [00:09:08] But yes, I'm just thinking. When I look at that inhaler, it's pretty specific. Uhm. Well, I think we did have both generic and specialty test inhalers. Mmm, but as a specialist, I'm something special manufacturers are a little more eager to sell their product to those who sell it.
Interviewer [00:09:32] Well, I say.
Participant 9 [00:09:34] that gives you a little more advertising than a generic product, let me put it this way.
Interviewer [00:09:37] Yes yes yes yes ok. Uhm drug changes happen more in the post-patent market. Because yes, of course, you only have one product for that. So that makes sense, what consequences does that have for the pharmacy. Do you know what I mean by drug changes or uh.
Participant 9 [00:09:58] Like one and one that one drug is converted to another or that you switch brands. Uh, changing brands, I think it's the same medicine, just changing brands.
Interviewer [00:10:09] Yes, brand changes, usually yes, usually yes, yes, yes.
Participant 9 [00:10:12] Yes, what are the consequences for the pharmacy? Yes, that's just annoying. You actually want to have one brand in stock. Uhm, but because the health insurers reimburse a different brand each month, you must have several brands of the same medicine in stock anyway.
Interviewer [00:10:34] Yes.
Participant 9 [00:10:35] As a result, you spend a lot of time worrying about shelf life problems. Uhm, but you also have the patient who says yes I don't want this brand, I really want that other brand. So you also need to have another brand in stock, which makes your inventory so incredibly large. With the same medicine in as many as three or four different forms. all with a different price tag on them. At some point, you will simply lose the overview. Just say sell out all the products completely. That's right, that's just almost impossible.
Interviewer [00:11:06] hmm hmm so you get a lot more spillage.
Participant 9 [00:11:08] That is. It's really a big yes, spillage, that's exactly what I was looking for yes.
Interviewer [00:11:12] Yes.
Participant 9 [00:11:13] That is really a disadvantage. The disadvantage for the pharmacy is that, uh, you would prefer to just have one party that can provide you with 100% of all your patients and that you can just agree on a contract with the health insurer. But that's not the case these days.

Interviewer [00:11:33] Uh, what are the differences in the use of drugs in the post-patent market? Consider, for example, the quality of medicines. Is there a difference in that?
Participant 9 [00:11:43] No, that's not there. No, there are such strict requirements for Uh for making drugs that I don't really think there are any differences in quality. Well, of course, you have a bit of these contaminations. Every now and then you hear a story about that in a factory in uh, I know what India or something like that, uh...
Interviewer [00:12:02] Yes.
Participant 9 [00:12:02] Uh, that the medicines that are made there are contaminated with a certain substance. Yes, I think that the chance of that, uh, is only slightly higher in, uh, in those generic products than in specialty products.
Interviewer [00:12:18] Mm now?
Participant 9 [00:12:20] Uhm, because they just need to be made as cheaply as possible. But there are such incredibly strict requirements. They need the medicine, the real active ingredient. Of course, that should be the same anyway.
Interviewer [00:12:33] Yes, yes, anyway.
Participant 9 [00:12:34] Your additives also try to keep them the same as much as possible. So can you really speak of a worse quality? I don't think so.
Interviewer [00:12:40] I uh uh differ in the quality of the dosage forms. You were just talking about inhalers. Yes, I think that's most appropriate for this.
Participant 9 [00:12:55] Yes, is there a difference? me. To be honest, I don't really like it. Get enough of those specialty inhalers that are really, uh, really difficult to use. And uh, then the generic variant may be easier to use. And when I see them for myself. Recently, we received an email from some oncological medicine where the generic manufacturer also wanted to adjust the dosage form so that it would be easier to dissolve. Uhm, so that's what they think, the generic manufacturers also think about that.
Interviewer [00:13:29] Ok ok. Uhm. There's still a difference in packaging.
Participant 9 [00:13:38] No, really no difference at all.
Interviewer [00:13:42] Is there anything else you'd like to add that hasn't been discussed yet?
Participant 9[00:13:52] No

Participant 10

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Interviewer[00:00:01] Yes, uh, can you give your consent to the recording again?
Participant 10 [00:00:06] I authorize recording.
Interviewer [00:00:08] Thank you Uh, what kind of changes do you think will happen for the pharmacy if one drug loses its patent? Please mention the most important aspects.
Participant 10 [00:00:21] Uhm uh uh most important. Well, then it will also be a lot cheaper for us. Uh, yes, that's twofold for the hospital. In principle, there are the yes, that's it an immediate profit for us, actually if something gets a lot cheaper and everything that goes through the city pharmacy, that actually comes fairly quickly, the preferential policy. So we notice a little, uh, less of that. For example, if an antibiotic goes out of patent and we pay for the specialty. Uh, yes, just the full swing and it goes out of patent, the intravenous antibiotics suddenly pay only 20% or something. Yes, so you'll notice that immediately in your uh costs.
Interviewer [00:01:05] Mm now? Right, yes. Well, that's where I'll start with, say, the second question: what can you say about the differences in monetary values? Between the post-patent

market and before. Well, good D It makes a big difference. At least, for certain products, but not for certain products, I already hear.
Participant 10 [00:01:24] Yes. For yes on the. Look, well, look, if it comes into the preference policy then so will it. It will therefore be considerably discounted, but we will notice that ourselves. Well, at least that's what we noticed in the health insurance company. Well then you just have to have uh with different boxes in stock and for the pharmacy, it's uh. You will notice it immediately. Unless it. That's also a difference. I don't know if you do that. You have, say, the hospital medicines that are simply paid for by the hospital, that are simply in the large bulk. You have the expensive drugs, addon drugs. I don't know if you know that difference?
Interviewer [00:01:55] No.
Participant 10 [00:01:56] So no. So, if you say, you have almost all antibiotics like that, those are just hospital costs, so that's just on the hospital's budget. That is simply included in the prices. And then you have very expensive resources. In addition, we declare them separately from the health insurance and you negotiate with the health insurance about what you get for that medicine. And if they are still in patent, they pay 100%. But as soon as such a drug is out of patent, the health insurer will say yes, we will only reimburse half, 70% or 30%. So you already have to renegotiate with the health insurer for those funds.
Interviewer [00:02:28] but on those expensive resources, you're making a profit, but you have a big margin, at least?
Participant 10 [00:02:36] Yes, that. No. That is therefore different: there are those where there is still a margin. But there are also those we, uh, that we focus on.
Interviewer [00:02:42] Yes. Oh ok. Ok, so this really depends on those agreements that uh you make.
Participant 10 [00:02:48] so that's really true for those expensive drugs. These are the uh yes, it's called Addon and those are the medicines, so we declare separately there. It is sometimes possible that we focus on it and we immediately notice everything that is just all the normal medicines, the hospital that do not fall under that regulation. Yes, and then, of course, you get the protocols sometimes need to be converted when something needs to be achieved and it's suddenly a different box than that has an impact on the uhm process behind that. So, of course, something else must be purchased. The other thing has to be bought out, so logistics and protocol requires some work.
Interviewer [00:03:25] Yes if it changes When it switches from specialty to generic.
Participant 10 [00:03:28] Yes.
Interviewer [00:03:28] Yes, ok. Uhm. Are there any differences between the discounts or favourable agreements that you can agree with, for example, generics or uh innovators?
Participant 10 [00:03:42] Yes, do you mean for a certain drug or for certain companies or that you would like to get more discounts than expected from generics?
Interviewer [00:03:50] Or well, I'm just thinking in general agreements so it may be for a certain drug, but it could also be at a certain company, because I'll let you make an appointment with uhm than to talk about a whole range of products, right?
Participant 10 [00:04:02] No no, we will make an appointment per medium.
Interviewer [00:04:04] Ok yes, oh yes as a hospital.

Participant 10 [00:04:06] Yes, that's like a hospital? And yes, as a hospital, we make by means. That's slightly different for a city pharmacy. And uh there are, uh uh uh, we buy for the hospital together with all the other teaching hospitals.
Interviewer [00:04:21] Yes.
Participant 10 [00:04:21] So we work with, uh, a bit of ISAs with all the UMCs and, uh, sometimes it happens that the specialist will even participate in that.
Interviewer [00:04:33] To that kind of agreement?
Participant 10 [00:04:34] With appointments and then, it is also possible that the specialty is cheaper than the generic.
Interviewer [00:04:40] ok, but that's like if a generic has already been added.
Participant 10 [00:04:43] Yes, and if there isn't one but only a specialty, we actually can. Yes, sometimes they give a little bit of an advantage for the, well, nice ones, a few percent discount. But then we can only usually get a discount if they are competing agents with the same indication. So if you have two different tools but they do the same thing, yes, you can say well gosh hey what is it? What is it worth to you if we use your product as the first choice?
Interviewer [00:05:08] Mm hu And then it always goes, then it's a game that keeps going down.
Participant 10 [00:05:11] Uh yes, it's the one about doing that in the they can always make an offer, so it's not like that one says that 10 percent and company B immediately says fifteen. Oh then I'll offer twenty. They get to make an offer once and that's it.
Interviewer [00:05:26] But then you have a contract and a fixed-term contract. So eventually, it goes further and further down.
Participant 10 [00:05:31] if, of course, it hasn't become firm B, it knows that it should be lower in price the next time Yes.
Interviewer [00:05:39] Ok. Uhm, what about the reliability of deliveries between patented products and generics?
Participant 10 [00:05:47] Well, overall the delivery of the patented drugs is better. Yes, generally yes. There are exceptions, but yeah. I think the margins are simply higher, so they can also have more in stock, and with Generics if the price is already very low and they lose a bidding round. Yeah, then it can cost a company a lot of money. Or If they therefore have too large stocks and no one is going to purchase it, that is a big cost for them. Well, for a company, I think it's a specialty firm that has enough euro's to absorb that, so I think that the ordinary couple will arrange their logistics much tighter, the generic ones, so that if something in the chain does not go well, they will quickly have a shortage. Because that's where you can, of course, save money in the chain. I think that, because of fewer stocks, that is much more the just in time. Yes, and if something goes wrong just in time, the consequences of delivery problems are very significant.
Interviewer [00:06:50] Ok. Uhm, I'll just explain this one a bit, because people usually don't understand all at once. Uh. Are there certain partnerships with patented products or generic products in an easier way to bring to a customer? So let's say you have a customer who comes to the pharmacy or hospital for the first time and then, uh, that's it. Uh, yes, are there agreements with, uh, generic or patented companies so that the sound customer understands more easily how you use the product.
Participant 10 [00:07:24] Yes, so it's really about the usage information.

Interviewer [00:07:26] Yes, yes.
Participant 10 [00:07:29] Yes, but those agreements are there, but the generic ones do that no less well than the specialties.
Interviewer [00:07:36] So there isn't really a difference between them.
Participant 10 [00:07:37] No, including patient information, for example. We have growth hormone as an example. We used to have that specialty. They all got nice magazines, those kids, how to use them and Everything. But the ones from the generics are almost even better.
Interviewer [00:07:50] Haha, yes, well, that's easier, of course. Also easy to take over if you. Yes, that's a folder, that's not real and that's just there, you can just view it, oh yeah, and that should be added.
Participant 10 [00:08:03] That's all well. So no. I have to say that, that's pretty close together then. Yes, maybe the cooler bag is a little less fancy, but haha.
Interviewer [00:08:11] Uh, of course, drug changes happen more when a product goes out of patent because there is a lot of competition. Uh what effect does that have for the pharmacy?
Participant 10 [00:08:22] Yes, for pharmacies, it is mainly the logistical problem. So say you have to make up your old inventory, buy new inventory and convert it. And when I'm in the hospital, that's actually okay. Well, that conversion is otherwise, uh, silent. But at the counter of the outpatient pharmacy that leads to a lot of discussions with some patients, which often takes a lot of time and we have quite a few patients who refuse the new box.
Interviewer [00:08:50] Hmm.
Participant 10 [00:08:51] Yes, and that's, uh, that's just really annoying.
Interviewer [00:08:54] Yes, it takes time.
Participant 10 [00:08:57] And if you're still looking at preferential policies, by the way. suppose uh that uh uh VGZ says July 1, that drug will be preferred and you still have old inventory, which means it will be after July 1.
Interviewer [00:09:10] Yes, you will no longer be reimbursed.
Participant 10 [00:09:11] No more getting what you bought yourself for. That is also important. So if I still have a specialty lying around and from July 1, I'll have to deliver the cheap generic, so uh, I won't be reimbursed properly anymore. so that also costs money for the outpatient pharmacy.
Interviewer [00:09:24] Yes, yes, with some products, then it's not worth really watching O lose them, but because they cost only a few cents, but with certain products, you really have to.
Participant 10 [00:09:34] With the expensive ones, you should actually make sure that you have actually completed it before 1 July in such a way that you can do it all at once.
Interviewer [00:09:37] Yes, really crazy, but. Yes, ok. Uh, what are the differences in the use of drugs in the post-patent market? Consider, for example, the quality of medicines. Does it make a difference?
Participant 10 [00:09:49] uh, not in my opinion. In a patient's eyes, yes.
Interviewer [00:09:53] In a patient's eyes, yes. Can you tell us a bit more about that?
Participant 10 [00:09:57] Yes, you know, I think that's also uh, a one, a, a patient who thinks that if you compare brands, for example, the coca cola with the LIDL cola.
Interviewer [00:10:07] Yes.
Participant 10 [00:10:08] Yes, that's not the same thing either. The brand tastes different from the g uh than the uh than the fake cola. And that's how they often see medicines. While yes,

that should all be investigated before it even happens. The one that still looks like the original, otherwise it just won't happen.
Interviewer [00:10:23] Maybe it's also kind of in the name of Specialite and then generic. Then you would think of specialty. Yes, look, that sounds much better.
Participant 10 [00:10:31] Yes, it's more expensive, fancy, the brand name and suddenly you get an uh yes.
Interviewer [00:10:35] Yes, yes,.
Participant 10 [00:10:36] I had the feeling that's what people feel. That they think I can't get it, the brand and they think the brand is better. But me, I don't believe in that.
Interviewer [00:10:45] No.
Participant 10 [00:10:46] I believe that has been studied in such a way because of what we have in the Netherlands here that.
Interviewer [00:10:51] Yes, good. But there is an interesting aspect that it actually just says, but the patient's experience is purely because of that. Then I think of the name. And that they also think it's cheaper, so worse. Yes yes yes. Ok. Uh, a difference in dosage forms, i.e. how the patient increases the drug. Is there still a difference in that? In its qualities.
Participant 10 [00:11:17] Uh uh no no yes no I don't think so. No, we do look at what is better for a patient to swallow.
Interviewer [00:11:25] Yes.
Participant 10 [00:11:26] You see that's what specialty companies do sometimes and then, uh, just before that patent expires, they make an easier form of administration, because then they hope everyone will use that easy form of administration and that they'll be there, uh...
Interviewer [00:11:39] Yes.
Participant 10 [00:11:40] Stay a middle.
Interviewer [00:11:41] Yes, people usually start a whole story about inhalers and Spiriva stuff here. Yes, that's what people find annoying, usually yes.
Participant 10 [00:11:52] Yes, that one. That is indeed if, as a hospital pharmacist, you see that less. Do I have less of that, uh.
Interviewer [00:11:59] Yes ok, that's another thing, yes, uh, yes, ok.
Participant 10 [00:12:02] I see that, yes, no, I can imagine that there will probably be differences, but I think that's not what I have enough desk experience for.
Interviewer [00:12:11] Uhm well, here's packaging, do you still find a difference?
Participant 10 [00:12:17] no, generally not. I think some packages are still too specialized. that they have expensive fancy boxes.
Interviewer [00:12:24] Yes, and then too big ok.
Participant 10 [00:12:26] Yes, we really have these kinds of boxes and then there are thirty tablets in them or something.
Interviewer [00:12:31] Oh yeah, that's big, yeah. Yes. Ok. Uhm. In previous interviews, I also heard something about sustainability. Do you still think there is a difference between them?
Participant 10 [00:12:41] Well, those big boxes, for example, I think so.
Interviewer [00:12:43] Ah big boxes yes, not something else?
Participant 10 [00:12:47] The smaller, the more you can put into a truck, the more. the better it is. And I must say yes, we did include it with the IPF tender last time. That the syringes had to be sustainable and green and uh yes D. But I have to say comparing them is quite difficult. So

one said yes, we really have a whole green pen that can be reused and the other said yes we have now. We have one pen that you have to throw away at a time, but we have calculated that it is less waste than the other pen from company A. Yes. So me.
Interviewer [00:13:17] Ok yes, it is also difficult.
Participant 10 [00:13:19] I think it's very important, but I still find it very difficult. There are still few points where you can compare it very well.
Interviewer [00:13:25] Yes, it's not there isn't some desk you're looking at, oh this is really the greenness gauge of certain products.
Participant 10 [00:13:32] Yes, so we are now asking companies to check with companies when we do a purchasing round. We then evaluate suppliers and they receive a Green Deal questionnaire. yes, you know, one says I drive electric cars and the other says our canteen is vegetarian or there are so many differences.
Interviewer [00:13:50] Ok.
Participant 10 [00:13:52] So what is that? what do you save with?
Interviewer [00:13:57] And what is it, are they mainly specialties, of course I want to know the differences?
Participant 10 [00:13:58] We do this at all companies and they say that the specialty firms are generally further along. They do more about, uh, an uh, about climate than the generics. But yes, because that thinks that's another money issue. So we're actively asking, but we know we don't have a good way to measure what product yet. Well, finally, until yes, the box might be filled in Haarlem, but maybe the pill came from India and flew here by plane first, you know, it's quite a bit. Transparency is still quite difficult.
Interviewer [00:14:33] That is difficult, yes. Yes, but that's what it says, made in Haarlem, isn't it? Yes, of the netherlands. Yes. Yes, yes, ok. Uh, is there anything else you'd like to add that hasn't been discussed yet. Just say between the differences between the.
Participant 10[00:14:49] No, yes, I no, I'm the no. I think we still often pay too much for the specialties.
Interviewer [00:14:55] Yes yes yes. Okay, then I'll stop recording.

Appendix I: Personal Interviews - Interview - Thank You Notes to Participants

Dutch

Beste,
Ik wil je nog extra bedanken voor je medewerking aan mijn onderzoek. Het finale product zal op 20 Juli af zijn en dan zal ik het naar jullie opsturen.

Met vriendelijke groet,
Karel Poels

English

(Dear,
I want to thank you extra for your cooperation in my research. The final product will be finished on July 20 and then I will send it to you.

Kind regards,
Karel Poels)

Appendix J: Personal Interviews - Letter for Member Checking

Dutch

Goedenavond …,
Ik ben klaar met de transcripties. Als je nog iets er uit wil hebben dan kun je dat nog aangeven tot 3 werkdagen.
Bijgevoegd is het transcript.
Nog hartelijk dank ervoor en je medewerking.

Met vriendelijke groet,
Karel Poels

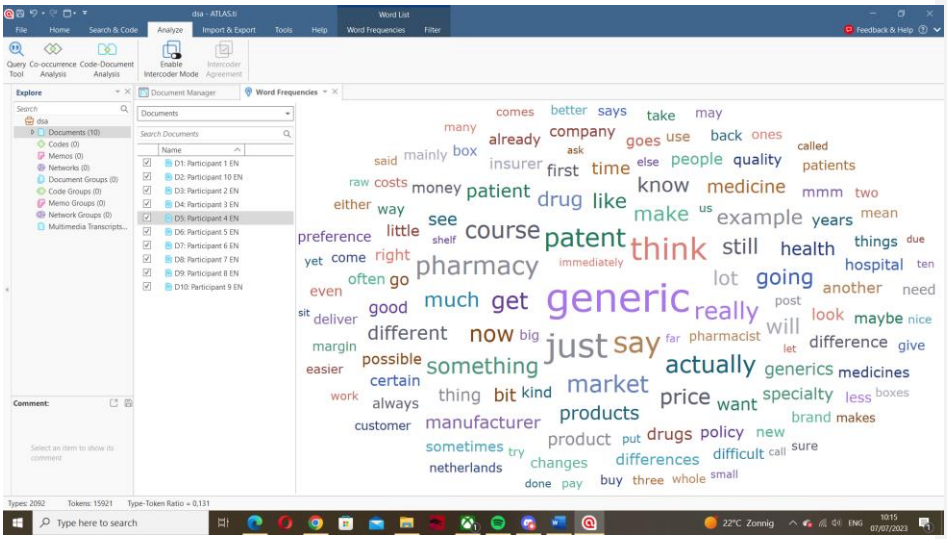
English

(Good evening ...,
I have finished the transcriptions. If you still want something from it you can still indicate it up to 3 business days.
Attached is the transcript.
Thank you very much for it and your cooperation.

Kind regards,
Karel Poels)

Appendix K: Raw Data – Word Clouds

Participant 1:



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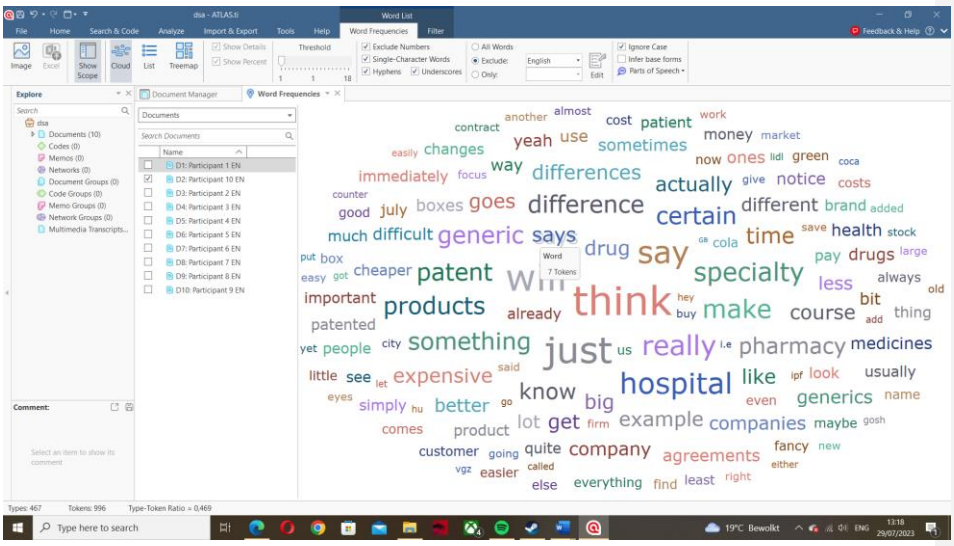

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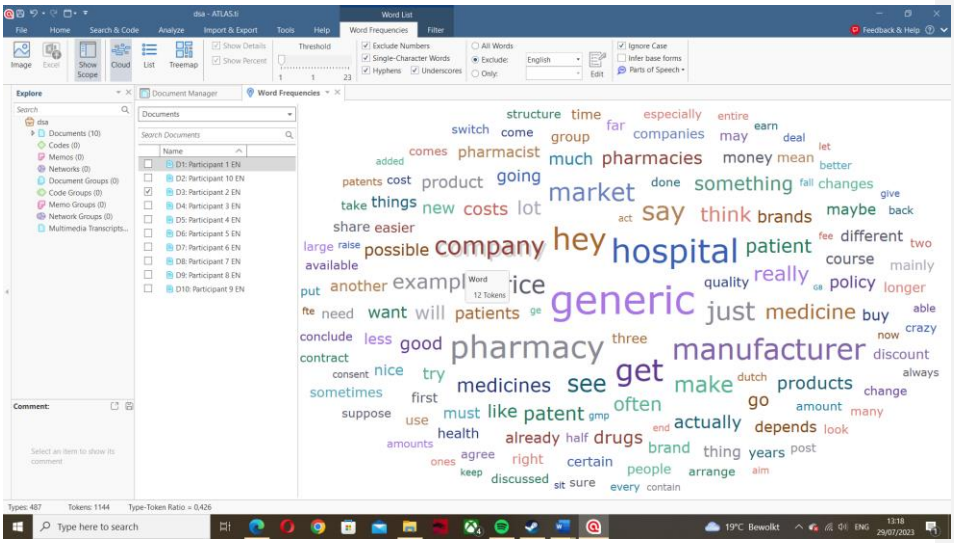

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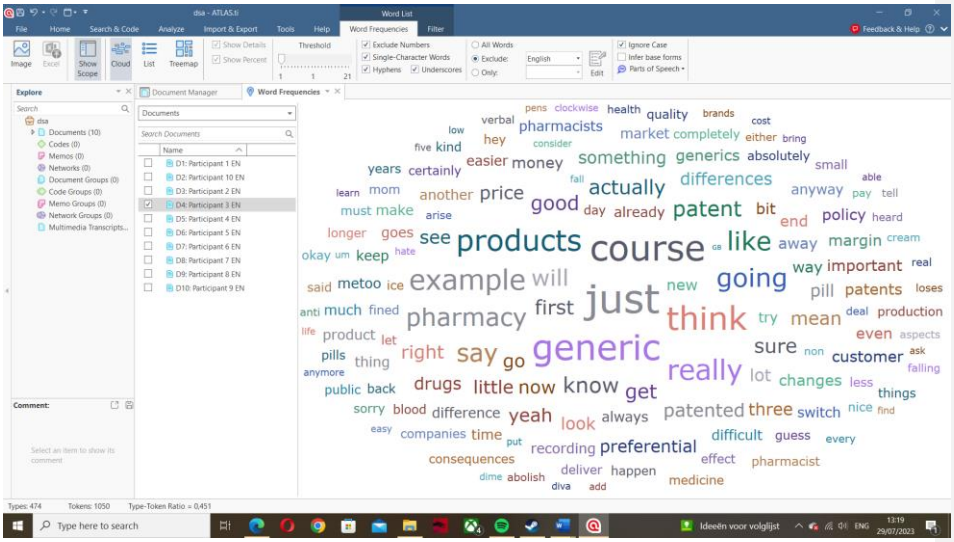

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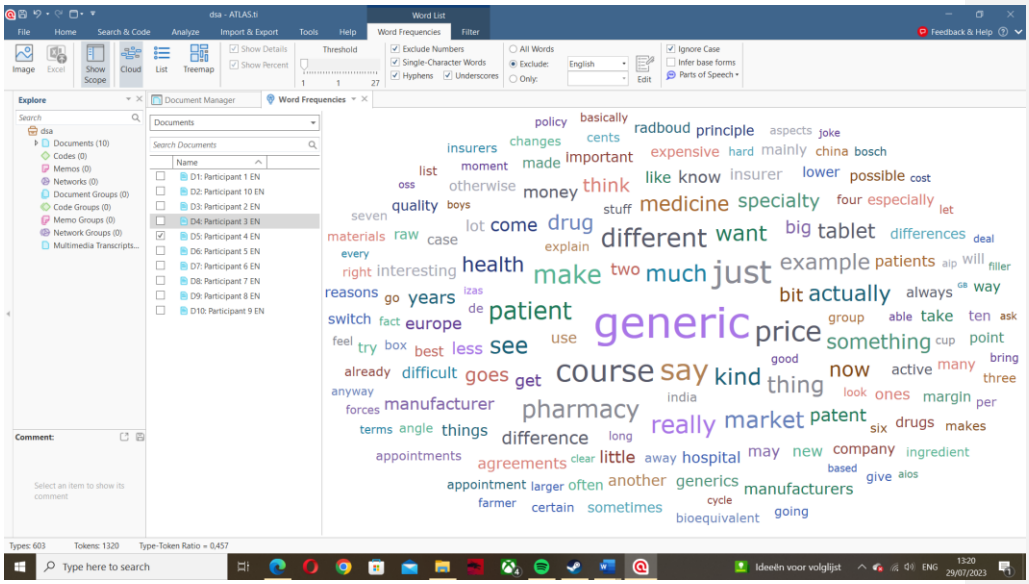

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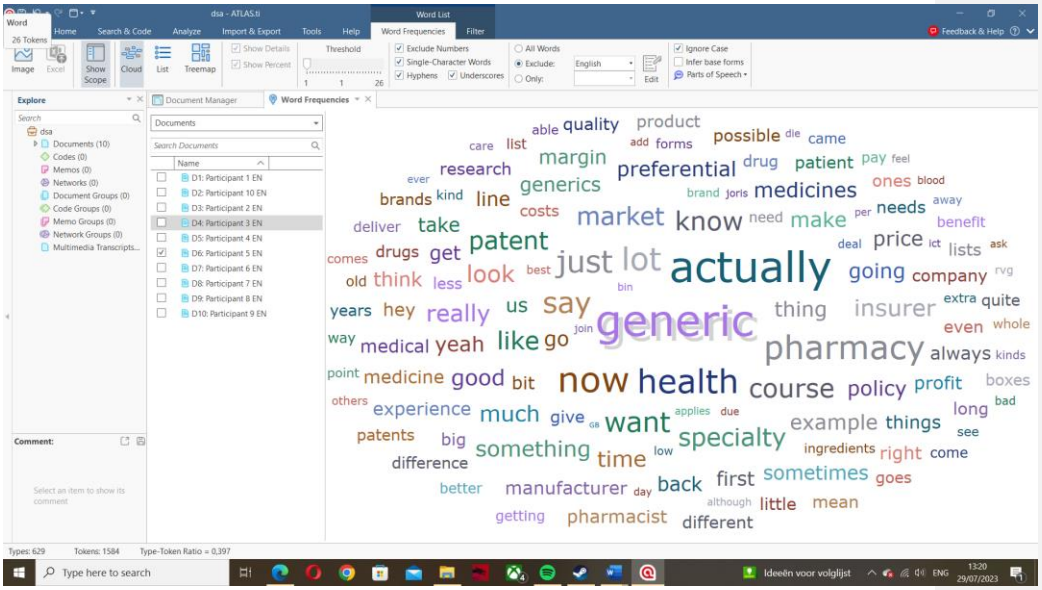

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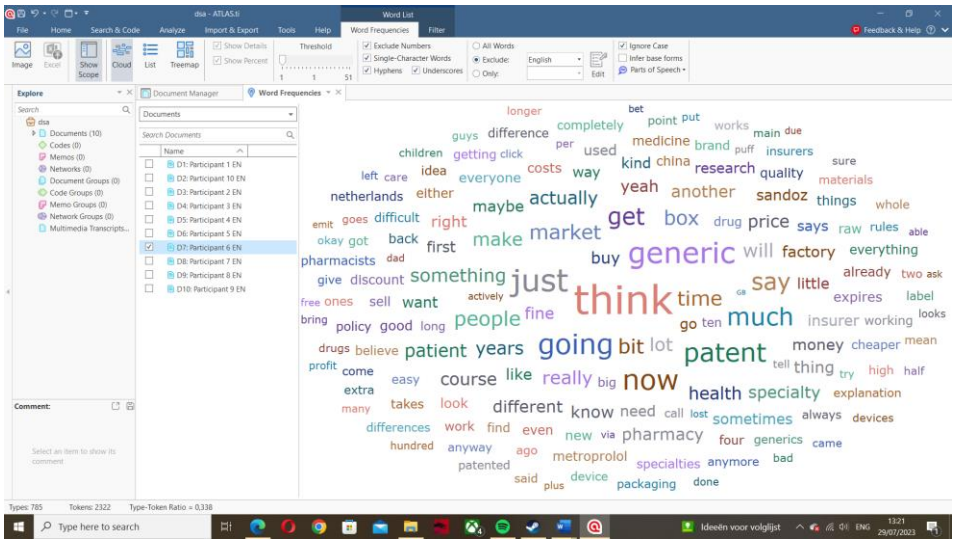

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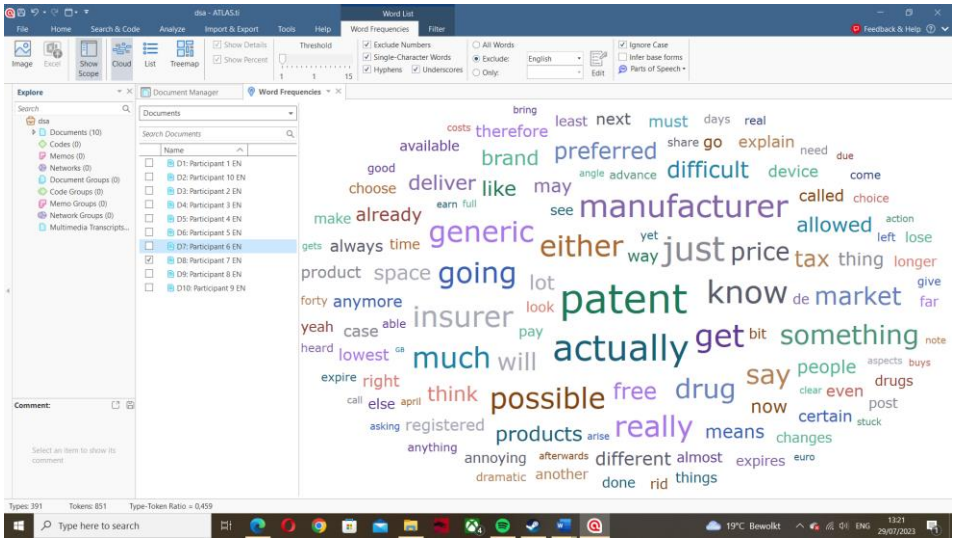

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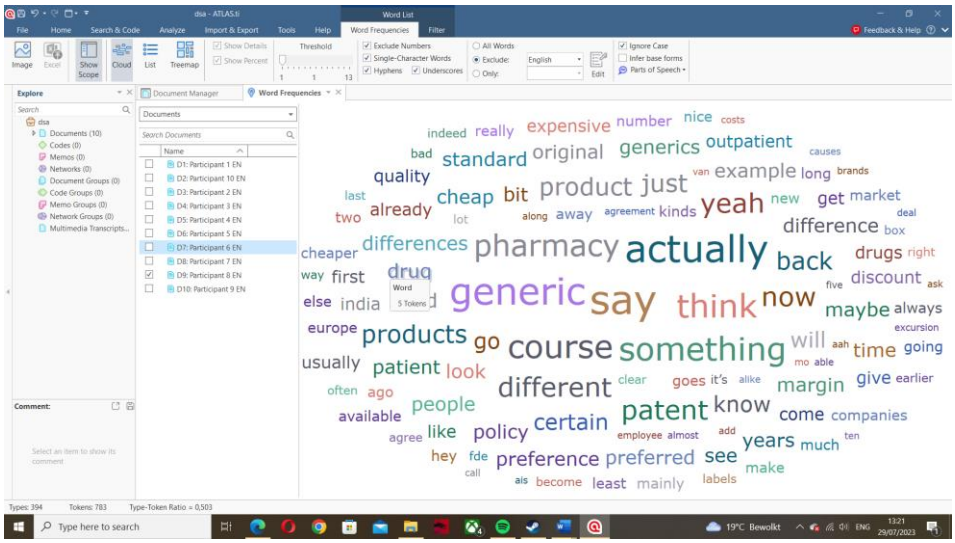

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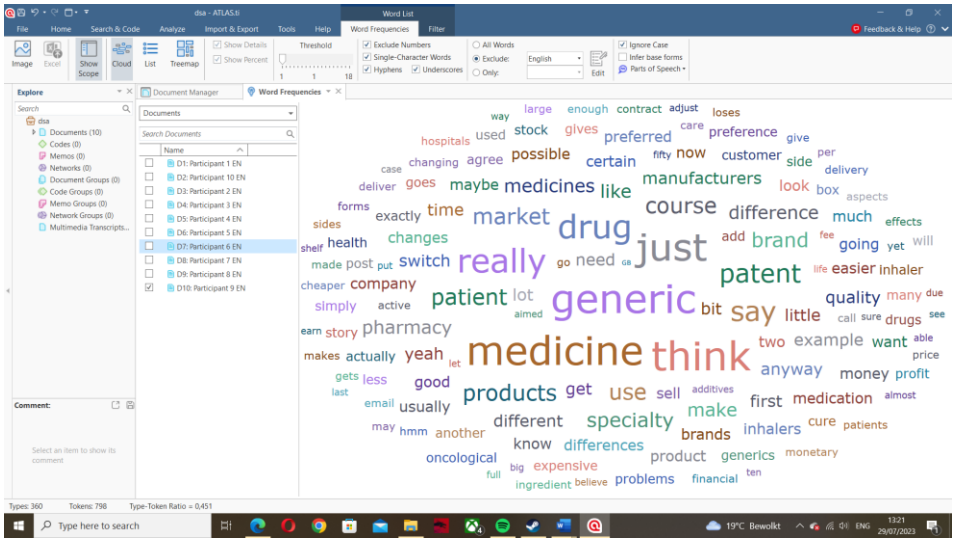

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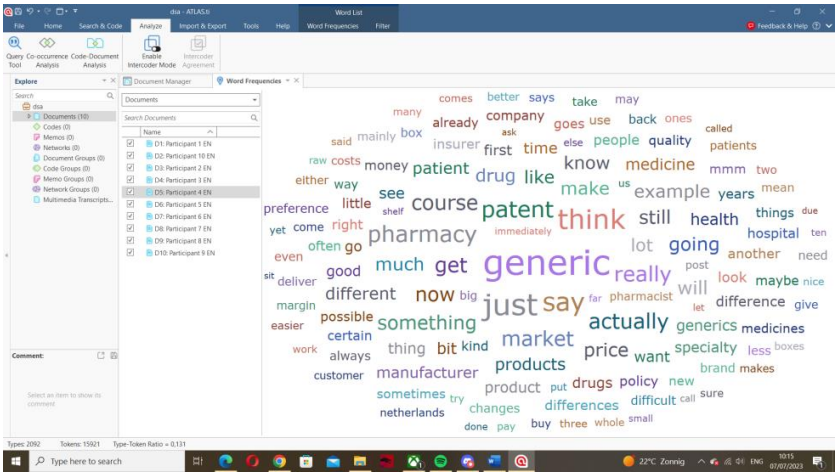
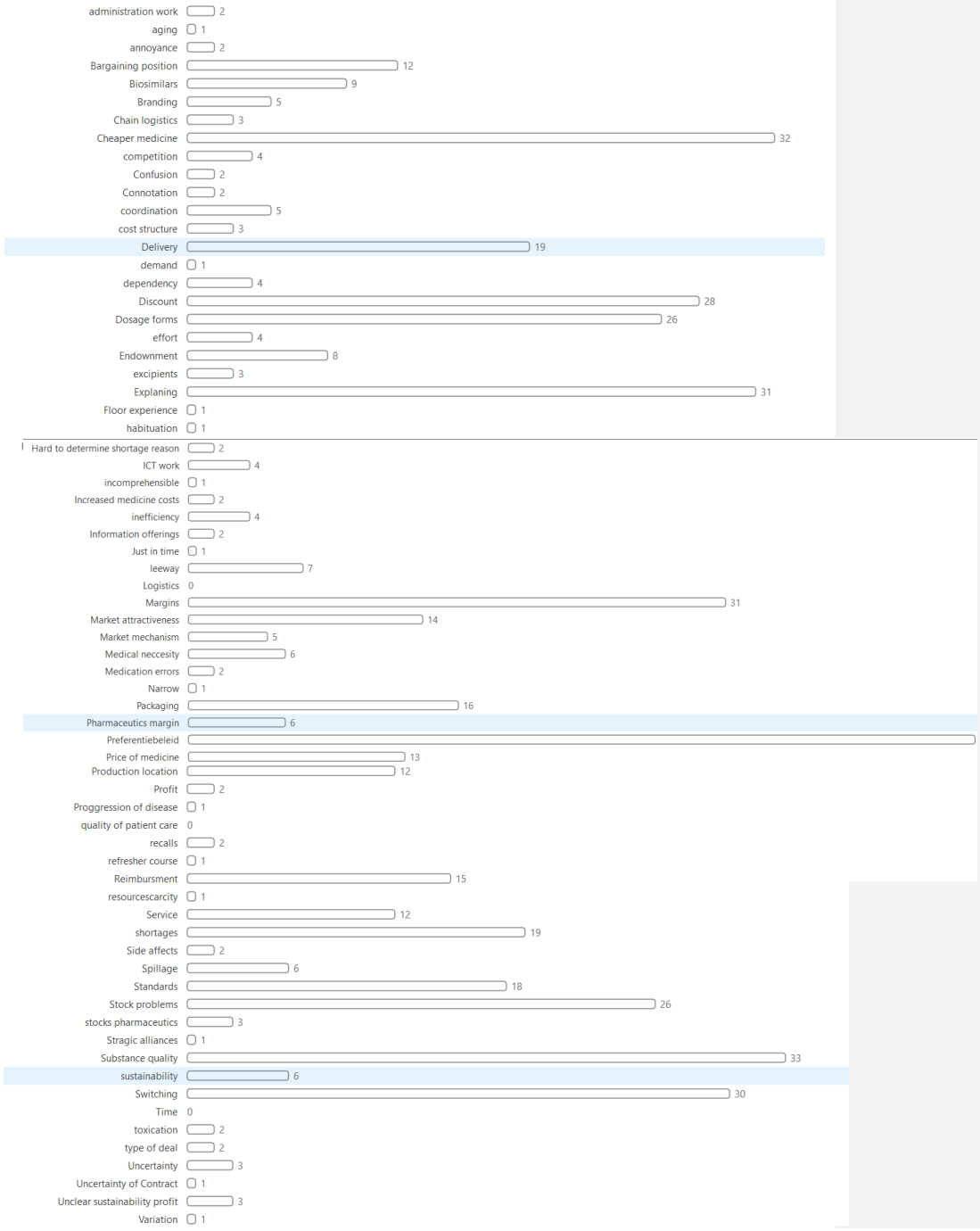
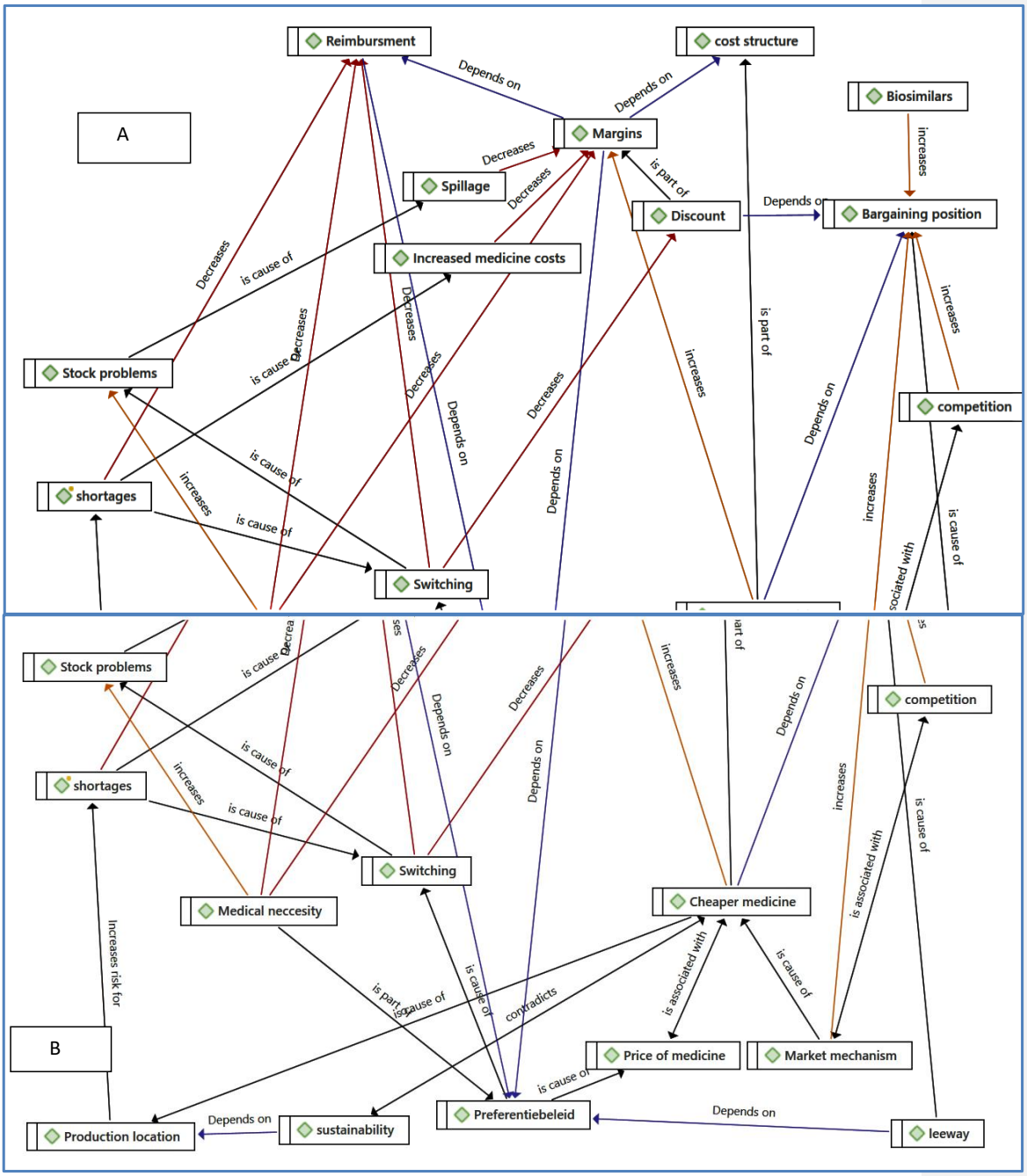
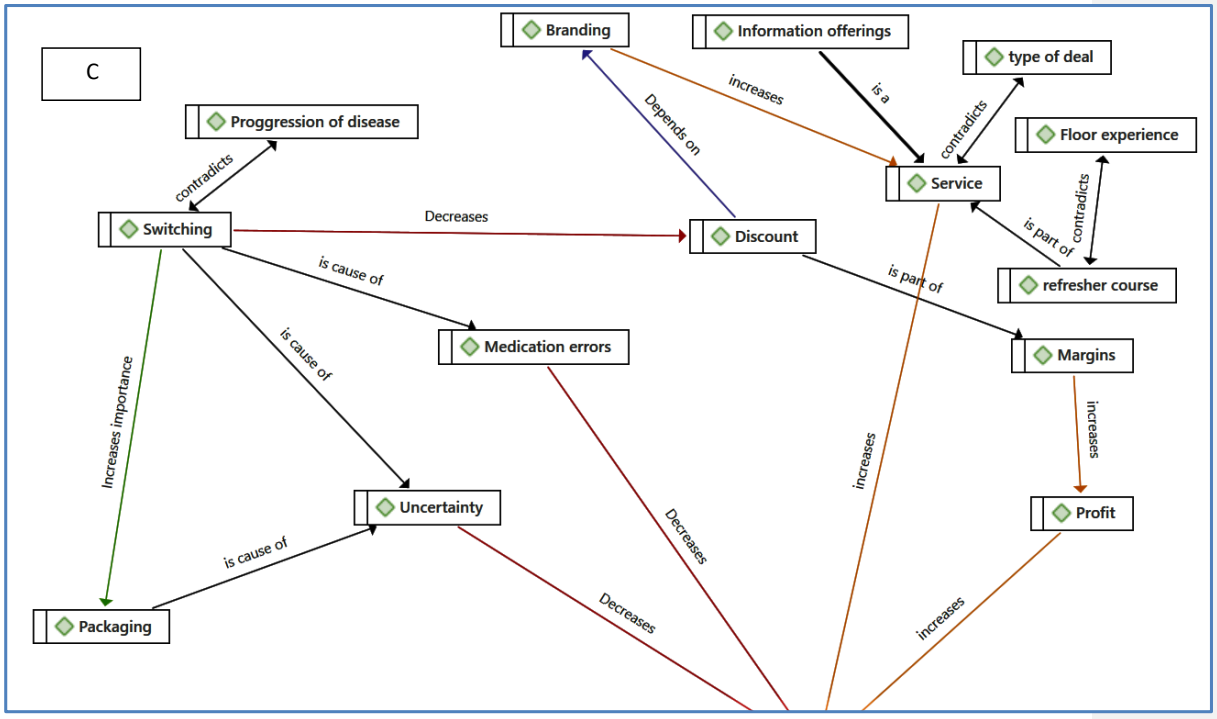


Appendix L: List of 2nd Round of Coding



Appendix M: Thematic Analysis Overview

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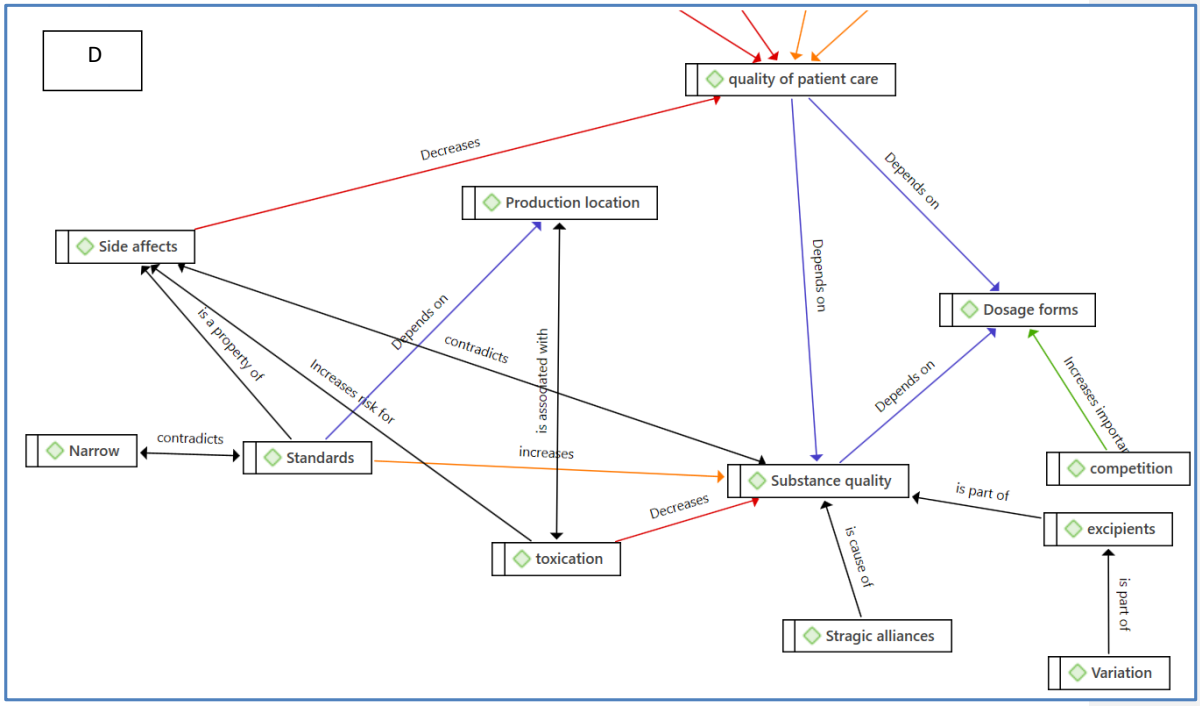
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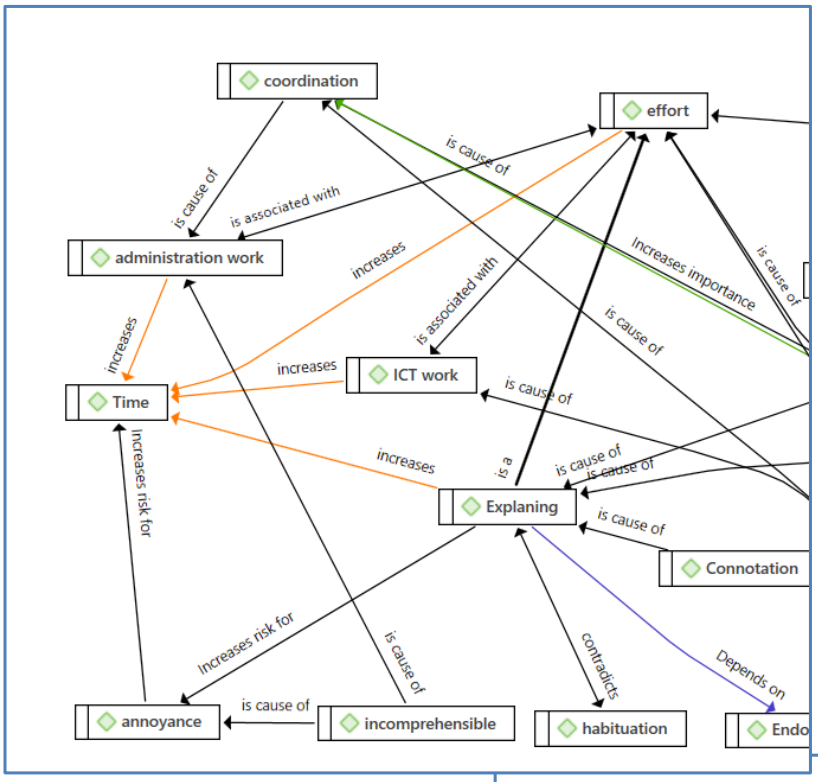
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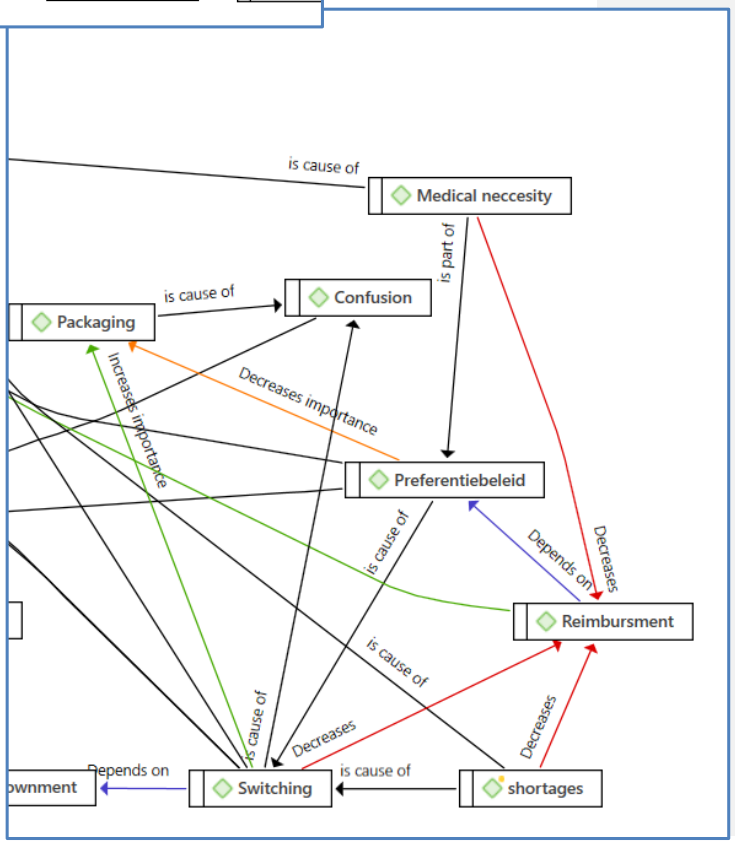
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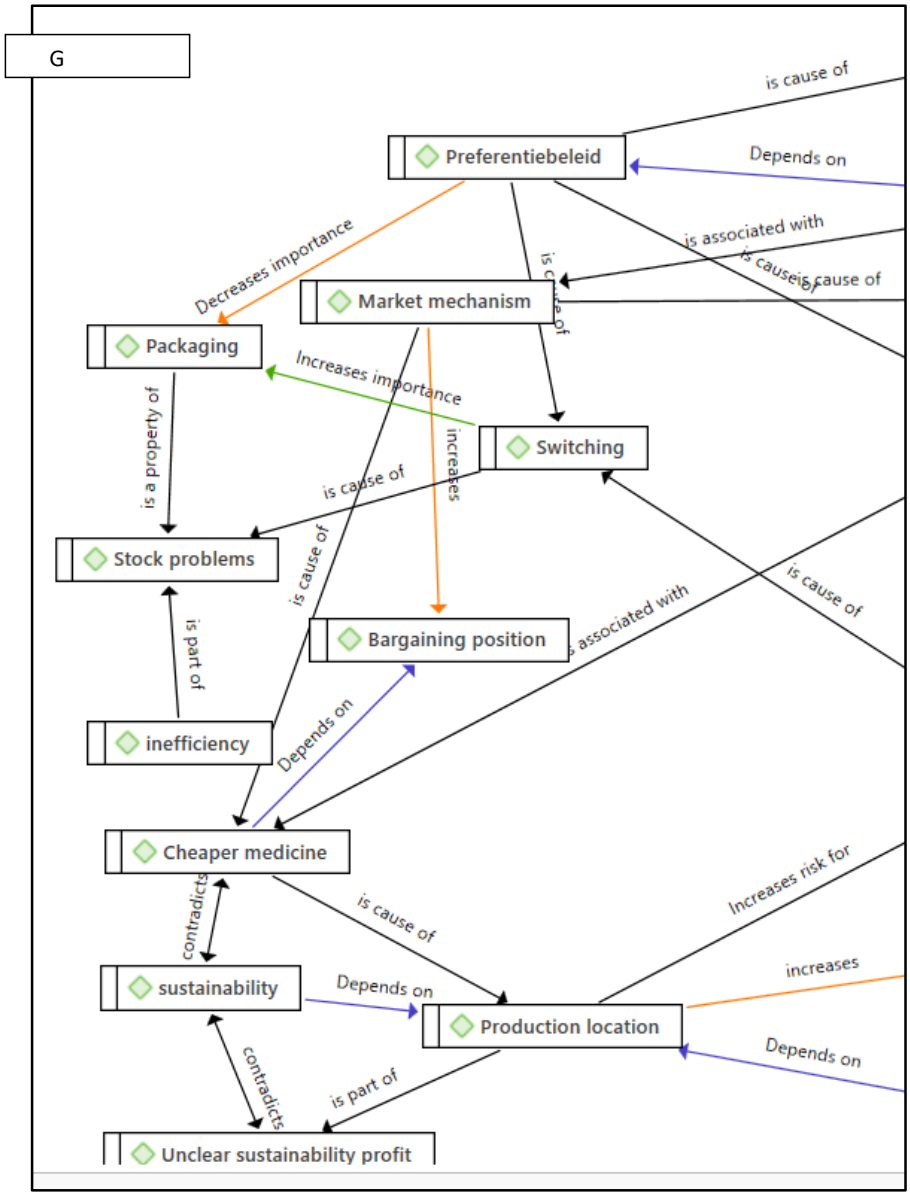
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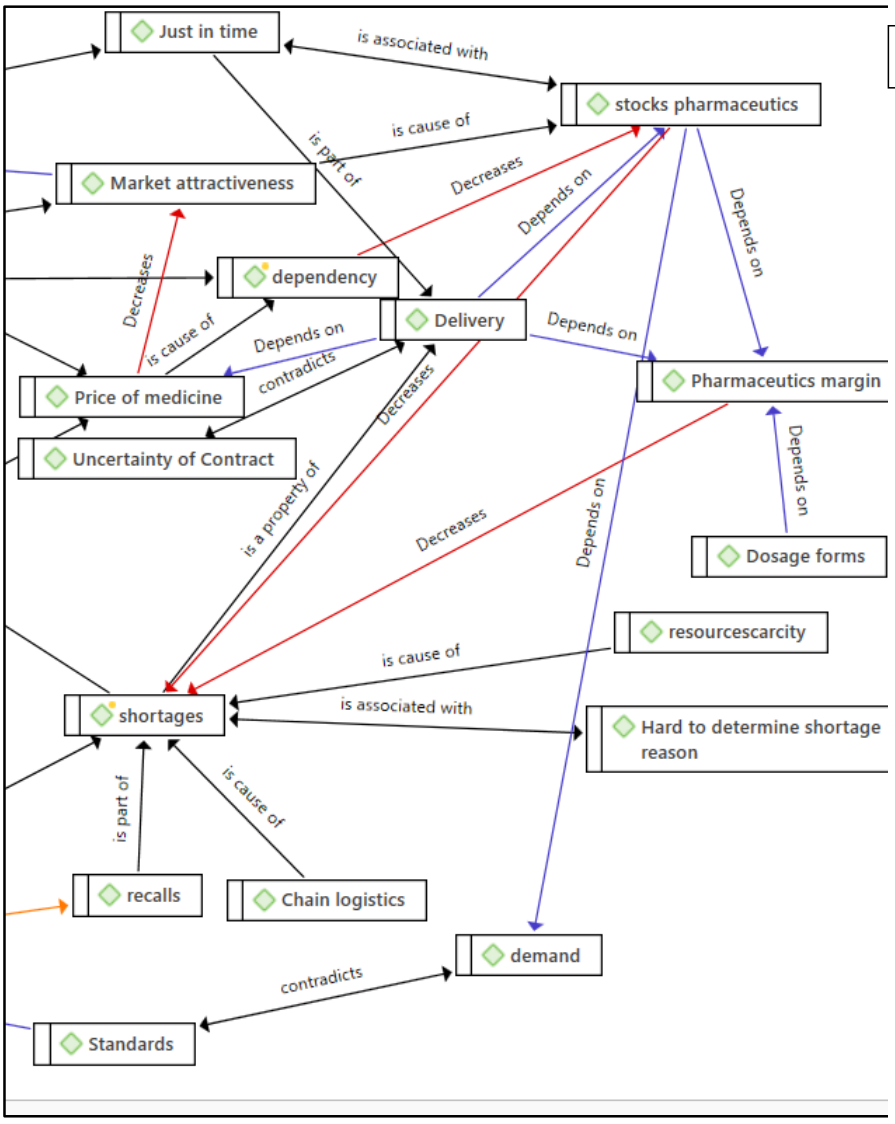
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Appendix N: ATLAS.ti Queries

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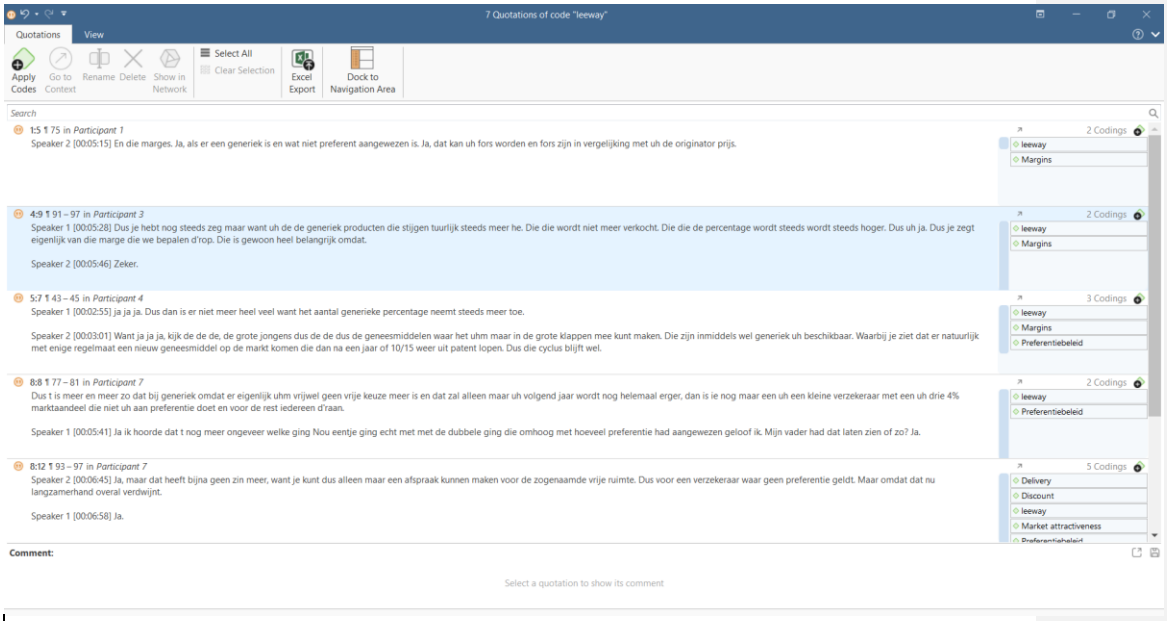

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